BTEC
HIGHER NATIONALS

Sport and Exercise Science

Specification
First Teaching from September 2018
First Certification from 2019

Higher National Certificate Lvl 4
Higher National Diploma Lvl 5
Edexcel, BTEC and LCCI qualifications

Edexcel, BTEC and LCCI qualifications are awarded by Pearson, the UK's largest awarding body offering academic and vocational qualifications that are globally recognised and benchmarked. For further information, please visit our qualifications website at qualifications.pearson.com. Alternatively, you can get in touch with us using the details on our contact us page at qualifications.pearson.com/contactus

About Pearson

Pearson is the world's leading learning company, with 35,000 employees in more than 70 countries working to help people of all ages to make measurable progress in their lives through learning. We put the learner at the centre of everything we do, because wherever learning flourishes, so do people. Find out more about how we can help you and your learners at qualifications.pearson.com

References to third party material made in this specification are made in good faith. Pearson does not endorse, approve or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

All information in this specification is correct at time of publication.

ISBN 978 1 446 94821 7

All the material in this publication is copyright © Pearson Education Limited 2020

Original image by recklessstudios / Shutterstock.com
## Summary of changes made between previous issue and this current issue

<table>
<thead>
<tr>
<th>Summary of changes made between previous issue and this current issue</th>
<th>Page number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Branding</strong></td>
<td>1-372</td>
</tr>
<tr>
<td>Added new front cover</td>
<td></td>
</tr>
<tr>
<td>Applied updated Pearson BTEC Higher Nationals branding colour, font and tables throughout the spec</td>
<td></td>
</tr>
<tr>
<td><strong>2.7 How Pearson BTEC Higher Nationals in Sport &amp; Exercise Science provide both transferable employability skills and academic study skills</strong></td>
<td>12</td>
</tr>
<tr>
<td>Correction. Changed word from moderated to verified</td>
<td></td>
</tr>
<tr>
<td><strong>3.2.1 English language requirements for Higher Nationals</strong></td>
<td>15-16</td>
</tr>
<tr>
<td>Updated section on English language requirements for Higher Nationals to clarify guidance</td>
<td></td>
</tr>
<tr>
<td><strong>4.2.4 Meeting local needs (MLN)</strong></td>
<td>42-43</td>
</tr>
<tr>
<td><strong>4.2.5 Pearson BTEC Higher National Commissioned Development</strong></td>
<td></td>
</tr>
<tr>
<td>Updated section and guidance</td>
<td></td>
</tr>
<tr>
<td><strong>6.3.2 Making assessment decisions using criteria</strong></td>
<td>67</td>
</tr>
<tr>
<td>Correction. Changed word from moderated to ‘verified’</td>
<td></td>
</tr>
<tr>
<td>Correction. Changed word from mark to ‘grade’</td>
<td></td>
</tr>
<tr>
<td>Correction. Changed word from marks to ‘grades’</td>
<td></td>
</tr>
<tr>
<td><strong>Unit 25: Work Experience</strong></td>
<td>257-263</td>
</tr>
<tr>
<td>Additional text in unit introduction to added:</td>
<td></td>
</tr>
<tr>
<td>Please note we recommend a minimum of 20 hours work experience with flexible completion (hours be completed in one or more placements as long as assessment criteria is achieved)</td>
<td></td>
</tr>
<tr>
<td><strong>Appendix 7</strong></td>
<td>370-372</td>
</tr>
<tr>
<td>Added RPL Mapping from L4 QCF to L4 RQF</td>
<td></td>
</tr>
</tbody>
</table>

If you need further information on these changes or what they mean, contact us via our website at: qualifications.pearson.com/en/support/contact-us.html.
# Contents

## 1 Introduction

1.1 The Student Voice
1.2 Why choose Pearson BTEC Higher Nationals?
1.3 HN Global
1.4 Qualification Titles
1.5 Qualification codes
1.6 Awarding institution
1.7 Key features
1.8 Collaborative development
1.9 Professional Body consultation and approval

## 2 Programming purpose and objectives

2.1 Purpose of the BTEC Higher Nationals in Sport & Exercise Science
2.2 Objectives of the BTEC Higher Nationals in Sport & Exercise Science
2.3 Aims of the Level 4 Higher National Certificate in Sport & Exercise Science
2.4 Aims of the Level 5 Higher National Diploma in Sport & Exercise Science
2.5 What could these qualifications lead to?
2.5.1 Progression to university
2.5.2 Employment
2.6 Use of Maths and English within the curriculum
2.7 How Pearson BTEC Higher Nationals in Sport & Exercise Science provide both transferable employability skills and academic study skills

## 3 Planning your programme

3.1 Delivering the Higher Nationals in Sport & Exercise Science
3.2 Entry requirements and admissions
3.2.1 English language requirements for Higher Nationals
3.2.2 Centre approval
3.2.3 Level of sector knowledge required
3.2.4 Resources required
3.2.5 HN Global support
3.2.6 Modes of delivery
3.2.7 Recommendations for employer engagement
3.2.8 Support from Pearson
3.2.9 Student employability 18
3.2.10 Importance of work experience 18
3.3 Access to study 20
3.4 Student registration and entry 20
3.5 Access to assessments 20
3.6 Administrative arrangements for internal assessment 21
  3.6.1 Records 21
  3.6.2 Reasonable adjustments to assessment 21
  3.6.3 Special consideration 22
  3.6.4 Appeals against assessment 22
3.7 Dealing with malpractice in assessment 22
  3.7.1 Internally assessed units 23
  3.7.2 Student malpractice 23
  3.7.3 Staff and centre malpractice 24
  3.7.4 Sanctions and appeals 24

4 Programme structure 26
  4.1 Units, Credits, Total Qualification Time (TQT) and Guided Learning (GL) 26
  4.2 Programme structures 27
    4.2.1 Unit numbering 28
    4.2.2 Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science 29
    4.2.3 Pearson BTEC Level 5 Higher National Diploma in Sport and Exercise Science 33
    4.2.4 Meeting local needs (MLN) 42
    4.2.5 Pearson BTEC Higher National Commissioned Development 43
  4.3 Pearson-set Assignments 43
  4.4 The unit descriptor 44
  4.5 National Governing Body Certifications/Additional Certifications 47

5 Teaching and learning 48
  5.1 Delivering quality and depth 48
    5.1.1 Embedded skills 50
  5.2 Engaging with employers 50
  5.3 Engaging with students 51
  5.4 Planning and structuring a programme 52
    5.4.1 Sequencing units 52
    5.4.2 Condensed, expanded or mixed delivery 53
5.4.3 Drawing on a wide range of delivery techniques 55
5.4.4 Assessment considerations 57
5.4.5 Formative assessment 57
5.4.6 Summative assessment 57
5.4.7 Assessment feedback 58
5.4.8 Designing valid and reliable assessments 58

6 Assessment 60

6.0.1 Example Assessment Briefs 61

6.1 Principles of internal assessment 61
6.1.1 Assessment through assignments 61
6.1.2 Assessment decisions through applying unit-based criteria 62
6.1.3 The assessment team 62
6.1.4 Effective organisation 63
6.1.5 Student preparation 63

6.2 Setting effective assessments 64
6.2.1 Setting the number and structure of assignments 64
6.2.2 Providing an assignment brief 65
6.2.3 Forms of evidence 65

6.3 Making valid assessment decisions 67
6.3.1 Authenticity of student work 67
6.3.2 Making assessment decisions using criteria 67
6.3.3 Dealing with late completion of assignments 68
6.3.4 Issuing assessment decisions and feedback 68
6.3.5 Resubmission opportunity 69
6.3.6 Repeat Units 69
6.3.7 Assessment Boards 69

6.4 Planning and record keeping 70

6.5 Calculation of the final qualification grade 71
6.5.1 Conditions for the award 71
6.5.2 Compensation provisions 71
6.5.3 Calculation of the overall qualification grade 72
6.5.4 Modelled student outcomes 73

7 Quality assurance 74

7.1 The approval process 74
7.2 Monitoring of internal centre systems 75
7.3 Independent assessment review 75
7.4  Annual Programme Monitoring Report (APMR) 76
7.5  Annual student survey 76
7.6  Centre and qualification approval 76
7.7  Continuing quality assurance and standards verification 77

8  Recognition of Prior Learning and attainment 79

9  Equality and diversity 80

10 Higher Nationals in Sports & Exercise Science Units 82
    Unit 1: Nutrition 83
    Unit 2: Fundamentals of Sport & Exercise Psychology 89
    Unit 3: Anatomy & Physiology 97
    Unit 4: Professional Skills 103
    Unit 5: Coaching Practice & Skill Development 111
    Unit 6: Training, Fitness, Testing 120
    Unit 7: Physical Activity, Lifestyle & Health 127
    Unit 8: Lifestyle Coaching 135
    Unit 9: Biomechanics 141
    Unit 10: Technology in Sport 148
    Unit 11: Injury Prevention 155
    Unit 12: Community Coaching 161
    Unit 13: Sports Massage 169
    Unit 14: Research Project 175
    Unit 15: Advanced Coaching 183
    Unit 16: Performance Analysis 190
    Unit 17: Talent Identification & Development 197
    Unit 18: Exercise Prescription 205
    Unit 19: Contemporary Issues in Health 211
    Unit 20: Health Community Engagement 217
    Unit 21: Sport & Exercise for Specific Groups 226
    Unit 22: Physical Education & School Sport 234
    Unit 23: Physical Literacy 242
    Unit 24: Personal & Professional Development 250
    Unit 25: Work Experience 257
    Unit 26: Exercise Physiology 264
<table>
<thead>
<tr>
<th>Unit Number</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Advanced Nutrition</td>
<td>270</td>
</tr>
<tr>
<td>28</td>
<td>Leadership &amp; Management</td>
<td>276</td>
</tr>
<tr>
<td>29</td>
<td>Teaching Practice</td>
<td>282</td>
</tr>
<tr>
<td>30</td>
<td>Entrepreneurism in Sport</td>
<td>289</td>
</tr>
<tr>
<td>31</td>
<td>Biochemistry of Exercise</td>
<td>296</td>
</tr>
<tr>
<td>32</td>
<td>Psychology for Performance</td>
<td>302</td>
</tr>
<tr>
<td>33</td>
<td>Strength &amp; Conditioning for Coaching</td>
<td>311</td>
</tr>
<tr>
<td>34</td>
<td>Innovation in Coaching</td>
<td>317</td>
</tr>
<tr>
<td>35</td>
<td>Contemporary Issues in Coaching</td>
<td>324</td>
</tr>
<tr>
<td>36</td>
<td>Applied Lifestyle Coaching</td>
<td>331</td>
</tr>
<tr>
<td>37</td>
<td>Sport Rehabilitation</td>
<td>337</td>
</tr>
</tbody>
</table>

### 11 Appendices

- Appendix 1: Mapping of HND in Sport & Exercise Science against FHEQ Level 5  
  
- Appendix 2: HNC/HND Sport & Exercise Science Programme Outcomes for Students  
  
- Appendix 3: Glossary of terms used for internally assessed units  
  
- Appendix 4: Assessment methods and techniques for Higher Nationals  
  
- Appendix 5: Transferable skills mapping  
  - Level 4 Higher National Certificate in Sport & Exercise Science: mapping of transferable employability and academic study skills  
  - Level 5 Higher National Diploma in Sport & Exercise Science: mapping of transferable employability and academic study skills  
  
- Appendix 6: Subject Benchmarks  
  
- Appendix 7: Recognition of Prior Learning  
  - QCF Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science mapped to the RQF Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science  
  
- Unit Mapping Overview  
  
- Unit Mapping Depth
1 Introduction

BTEC is one of the world’s most recognised applied learning brands, engaging students in practical, interpersonal and thinking skills for more than thirty years. BTECs are work-related qualifications for students taking their first steps into employment, or for those already in employment and seeking career development opportunities. BTECs provide progression into the workplace either directly or via study at university and are also designed to meet employers’ needs. Therefore, Pearson BTEC Higher National qualifications are widely recognised by industry and higher education as the principal vocational qualification at Levels 4 and 5.

When developing the Pearson BTEC Higher National qualifications in Sport & Exercise Science, we collaborated with a wide range of students, employers, higher education providers, colleges and subject experts to ensure that the new qualifications meet their needs and expectations. We also worked closely with the relevant Professional Bodies to ensure alignment with recognised professional standards.

There is now a greater emphasis on employer engagement and work readiness. The new BTEC Higher National qualifications in Sport & Exercise Science are designed to reflect this increasing need for high-quality professional and technical education pathways at Levels 4 and 5, thereby providing students with a clear line of sight to employment and to progression to a degree at Level 6.

1.1 The Student Voice

Students are at the heart of what we do. That is why, from the outset, we consulted with students in the development of these qualifications. We involved them in writing groups, sought their feedback, and added their voices and views to those of other stakeholders.

The result, we believe, are qualifications that will meet the needs and expectations of students worldwide.

1.2 Why choose Pearson BTEC Higher Nationals?

Pearson BTEC Higher Nationals are designed to help students secure the knowledge skills and behaviours needed to succeed in the workplace. They represent the latest in professional standards and provide opportunities for students to develop behaviours for work, for example by undertaking a group project, or responding to a client brief. A student may even achieve exemption from professional or vendor qualifications, or student membership of selected professional bodies, to help them on their journey to professional competence.
At the same time the BTEC Higher Nationals are intended to keep doors open for future study should a student wish to progress further in their education after their level 5 study. They do this by allowing space for the development of higher education study skills, such as the ability to research. Clear alignment of level of demand with the Framework for Higher Education qualification descriptors at level 4 and 5 means that students wishing to progress to level 6 study should feel better prepared. The Pearson BTEC Higher Nationals address these various requirements by providing:

- A range of core, optional and specialist units, each with a clear purpose, so there is something to suit each student’s choice of programme and future progression plans.
- Fully revised content that is closely aligned with the needs of employers, professional bodies, vendors and higher education for a skilled future workforce.
- The opportunity to develop transferable skills useful for work and for higher education, including research skills, the ability to meet deadlines and communication skills.
- Learning Outcomes mapped against Professional Body standards and vendor accreditation requirements, where appropriate.
- Assessments and projects chosen to help students progress to the next stage (this means some are set by the centre to meet local needs, while others are set by Pearson). Students are required to apply their knowledge to a variety of assignments and activities, with a focus on the holistic development of practical, interpersonal and higher level thinking skills.
- An approach to demand at level 4 and 5 which is aligned with the Framework for Higher Education Qualifications (FHEQ).
- Support for student and tutors including Schemes of Work and Example Assessment Briefs

1.3 HN Global

Pearson BTEC Higher Nationals are supported by a specially designed range of digital resources, to ensure that tutors and students have the best possible experience during their course. These are available from the HN Global website http://www.highernationals.com/.

With HN Global, tutors can access programme specifications which contain useful information on programme planning and quality assurance processes. Tutors can also view Schemes of Work and Example Assessment Briefs, helping them create meaningful courses and assessments. HN Global also allows tutors to create and annotate reading lists for their students and also keep up-to-date on the latest news regarding HN programmes.
1.4 Qualification Titles

Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science

Specialist pathways are included within brackets in the qualification title:

- Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science
- Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science (Coaching Science)
- Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science (Exercise, Health & Lifestyle)

Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science

Specialist pathways are included within brackets in the qualification title:

- Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science
- Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science (Coaching Science)
- Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science (Exercise, Health & Lifestyle)

1.5 Qualification codes

Ofqual Regulated Qualifications Framework (RQF) Qualification numbers:

Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science:
603/2276/7

Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science:
603/2277/9

1.6 Awarding institution

Pearson Education Ltd.

1.7 Key features

Pearson BTEC Higher National qualifications in Sport & Exercise Science offer:

- A stimulating and challenging programme of study that will be both engaging and memorable for students.
- The essential subject knowledge that students need to progress successfully into further study or the world of work.
- A simplified structure: students undertake a substantial core of learning in the Higher National Certificate and can build on this in the Higher National Diploma, with optional units linked to their specialist area of study.
● Specialist pathways in the Level 5 Diploma, so there is something to suit each student's preference of study and future progression plans.

● Refreshed content that is closely aligned with Professional Body, employer and higher education needs.

● Assessments that consider cognitive skills (what students know) along with affective and applied skills (respectively how they behave and what they can do)

● Unit-specific grading and Pearson-set assignments.

● A varied approach to assessment that supports progression to Level 6 and also allows centres to offer assessment relevant to the local economy, thereby accommodating and enhancing different learning styles.

● Quality assurance measures – as outlined in sections 6 and 7 of this Programme Specification – to ensure that all stakeholders (e.g. professional bodies, universities, colleges and students) can feel confident in the integrity and value of the qualifications.

● A qualification designed to meet the needs and expectations of students aspiring to work in an international environment.

Qualification frameworks

Pearson BTEC Higher National qualifications are designated higher education qualifications in the UK. They are aligned to the Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland, and Quality Assurance Agency (QAA) Subject Benchmark Statements. These qualifications are part of the UK Regulated Qualifications Framework (RQF).

1.8 Collaborative development

Students completing their BTEC Higher Nationals in Sport & Exercise Science will be aiming to go on to employment or progress to a final year at university. Therefore, it was essential that we developed these qualifications in close collaboration with experts from professional bodies and universities, and with the providers who will be delivering the qualifications.

We are very grateful to the university and further education tutors, employers, Professional Body representatives and other individuals who have generously shared their time and expertise to help us develop these new qualifications.

● Loughborough College
● University of Surrey
● Leeds Beckett
● Loughborough University
● University of Gloucestershire
1.9 Professional Body consultation and approval

These qualifications have also been approved by the following professional bodies as suitable qualifications for students wanting to work towards gaining membership.

The professional bodies include:

- The Chartered Institute for the Management of Sport and Physical Activity (CIMSPA)
2 Programming purpose and objectives

2.1 Purpose of the BTEC Higher Nationals in Sport & Exercise Science

The purpose of BTEC Higher Nationals in Sport & Exercise Science is to develop students as professional, self-reflecting individuals able to meet the demands of employers in the Sport & Exercise Science sector and adapt to a constantly changing world. The qualifications aim to widen access to higher education and enhance the career prospects of those who undertake them.

2.2 Objectives of the BTEC Higher Nationals in Sport & Exercise Science

The objectives of the BTEC Higher Nationals in Sport & Exercise Science are as follows:

- To equip students with Sport & Exercise Science skills, knowledge and the understanding necessary to achieve high performance in the global Sport & Exercise Science environment.
- To provide education and training for a range of careers in Sport & Exercise Science, including Exercise Referral Instructor, Advanced Coach, Sports Performance Assistant.
- To provide insight and understanding into the diversity of roles within Sport & Exercise Science, recognising the importance of collaboration at all levels.
- To equip students with knowledge and understanding of culturally diverse organisations, cross-cultural issues, diversity and values.
- To provide opportunities for students to enter or progress in employment in Sport & Exercise Science, or progress to higher education qualifications such as an Honours degree in Sport & Exercise Science or a related area.
- To provide opportunities for students to develop the skills, techniques and personal attributes essential for successful working lives.
- To support students to understand the local, regional and global context of Sport & Exercise Science and, for those students with a global outlook, to aspire to international career pathways.
- To provide students with opportunities to address contemporary issues facing the industry, and society at large; with particular emphasis on sustainability and the environment, recognising the role that Sport & Exercise Science plays in addressing these issues.
• To provide opportunities for students to achieve a nationally-recognised professional qualification within their chosen area of specialisation.

• To provide opportunities for students to achieve vendor accredited certifications.

• To offer students the chance of career progression in their chosen field, with particular emphasis on achieving management-level positions, professional recognition and beyond.

• To allow flexibility of study and to meet local or specialist needs.

• To offer a balance between employability skills and the knowledge essential for students with entrepreneurial, employment or academic aspirations.

• To provide students with opportunities to engage in an industry-recognised apprenticeship scheme that aligns with their employer's needs and their own career aspirations.

• To provide students with the context in which to consider professional ethics and their relation to personal, professional and statutory responsibilities within the industry.

We meet these objectives by:

• Providing a thorough grounding in Sport & Exercise Science principles at Level 4 that leads the student to a range of specialist progression pathways at Level 5 relating to individual professions within the Sport & Exercise Science sector

• Equipping individuals with commercial acumen, understanding and Sport & Exercise Science skills for success in a range of roles in Sport & Exercise Science

• Enabling progression to a university degree by supporting the development of appropriate academic study skills

• Enabling progression to further professional qualifications in specific Sport & Exercise Science areas by mapping to units in a range of professional Sport & Exercise Science qualifications.

**Who is this qualification for?**

The BTEC Higher National qualifications in Sport & Exercise Science are aimed at students wanting to continue their education through applied learning. Higher Nationals provide a wide-ranging study of the Sport & Exercise Science sector and are designed for students who wish to pursue or advance their career in Sport & Exercise Science. In addition to the knowledge, understanding and skills that underpin the study of Sport & Exercise Science, Pearson BTEC Higher Nationals in Sport & Exercise Science give students experience of the breadth and depth of the sector that will prepare them for further study or training.
2.3 Aims of the Level 4 Higher National Certificate in Sport & Exercise Science

The Level 4 Higher National Certificate in Sport & Exercise Science offers students an introduction to the subject area via a mandatory core of learning, while allowing for the acquisition of skills and experience through the selection of optional units across a range of occupational sectors at Level 4. This effectively builds underpinning core skills while preparing the student for subject specialisation at Level 5. Students will gain a wide range of sector knowledge tied to practical skills gained in research, self-study, directed study and workplace scenarios.

Level 4 Higher National Certificate in Sport & Exercise Science also offers the following two specialist pathways for students who wish to concentrate on a particular aspect of Sport & Exercise Science:

- Coaching Science
- Exercise, Health & Lifestyle.

There is also a non-specialist ‘General Sport & Exercise Science’ pathway, which allows students to complete a Level 4 Higher National Certificate without committing to a particular professional specialism. This offers additional flexibility to providers and students.

At Level 4, students develop a broad knowledge and awareness of key aspects of Sport & Exercise Science through four Core units, which include one unit assessed by a Pearson-set assignment. The units are:

- Nutrition
- Fundamentals of Sport & Exercise Psychology
- Anatomy & Physiology
- Professional Skills (Pearson-set unit).

Depending on the specialist’ pathway, at Level 4, students will undertake a further two Specialist units (related to their Level 4 Pathway) from:

- Coaching Practice & Skill Development
- Training, Fitness, Testing
- Physical Activity, Lifestyle & Health
- Lifestyle Coaching.
The centre can also choose two further Optional units at Level 4 from the following:

- Biomechanics
- Technology in Sport
- Injury Prevention
- Community Coaching
- Sports Massage.

Graduates successfully completing the Higher National Certificate will be able to demonstrate a sound knowledge of the basic concepts of Sport & Exercise Science. They will be able to communicate accurately and appropriately and they will have the qualities needed for employment that requires some degree of personal responsibility. They will have developed a range of transferable skills to ensure effective team working, independent initiatives, organisational competence and problem-solving strategies. They will be adaptable and flexible in their approach to Sport & Exercise Science, show resilience under pressure, and meet challenging targets within a given resource.

2.4 Aims of the Level 5 Higher National Diploma in Sport & Exercise Science

The Level 5 Higher National Diploma in Sport & Exercise Science offers students two specialist pathways designed to support progression into relevant occupational areas or on to degree-level study. These pathways are linked to the skills matrix produced by CIMSPA (where appropriate) and can provide professional status and progression to direct employment.

The Level 5 Higher National Diploma offers the following specialist pathways for students who wish to concentrate on a particular aspect of Sport & Exercise Science:

- Coaching Science
- Exercise, Health & Lifestyle.

There is also a non-specialist ‘General Sport & Exercise Science’ pathway, which allows students to complete a Level 5 Higher National Diploma without committing to a particular professional specialism. This offers additional flexibility to providers and students.

Holders of the Level 5 Higher National Diploma will have developed a sound understanding of the principles in their field of study and will have learned to apply those principles more widely. They will have learned to evaluate the appropriateness of different approaches to solving problems. They will be able to perform effectively in their chosen field and will have the qualities necessary for employment in situations requiring the exercise of personal responsibility and decision-making.
2.5  What could these qualifications lead to?

The Level 4 Higher National Certificate provides a solid grounding in Sport & Exercise Science, which students can build on should they decide to continue their studies beyond the Certificate stage. The Level 5 Higher National Diploma allows students to specialise by committing to specific career paths and progression routes to degree-level study.

On successful completion of the Level 5 Higher National Diploma, students can develop their careers in the Sport & Exercise Science sector through:

- Entering employment
- Continuing existing employment
- Linking with the appropriate Professional Body
- Linking with the appropriate certificates
- Committing to Continuing Professional Development (CPD)
- Progressing to university.

2.5.1 Progression to university

The Level 5 Higher National Diploma is recognised by Higher Education providers as meeting admission requirements to many relevant Sport & Exercise Science-related courses, for example:

- BA (Hons) Sport & Fitness Studies
- BSc (Hons) Sport and Exercise Science
- BSc (Hons) Sports Studies.

Students should always check the entry requirements for degree programmes at specific Higher Education providers. After completing a BTEC Higher National Certificate or Diploma, students can also progress directly into employment.

University recognition and articulations

We work with a number of universities around the world to recognise and accept Pearson BTEC Higher Nationals as a qualification for entry onto an undergraduate degree. Many universities now allow advanced entry onto the second or third year of a degree. Some universities have direct articulations on to the second or third year of a bachelor’s degree programme with Pearson BTEC Higher Nationals. Students should be aware that university admission criteria is always subject to change and understand the course entry requirements for subject, year and grade before applying.

For more information on entry requirements, including 2+1 articulations, please visit: https://degreecoursefinder.pearson.com
2.5.2 Employment

The skills offered as part of the Pearson BTEC Higher National Diploma can provide graduates with the opportunity to work in many different areas of the Sport & Exercise Science sector. Below are some examples of job roles each qualification could lead to:

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Job Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coaching Science</td>
<td>Sport Coach</td>
</tr>
<tr>
<td></td>
<td>Community Sports Leader</td>
</tr>
<tr>
<td></td>
<td>Performance Developer</td>
</tr>
<tr>
<td>Exercise, Health &amp; Lifestyle</td>
<td>Sports Development Officer</td>
</tr>
<tr>
<td></td>
<td>Sports Therapist</td>
</tr>
<tr>
<td></td>
<td>Cardiac Rehabilitation Technician</td>
</tr>
<tr>
<td>General/All Pathways</td>
<td>Leisure Development Officer</td>
</tr>
<tr>
<td></td>
<td>Strength and conditioning</td>
</tr>
<tr>
<td></td>
<td>Armed forces or uniformed services</td>
</tr>
<tr>
<td></td>
<td>Teaching or lecturing (via a PGCE)</td>
</tr>
<tr>
<td></td>
<td>Sports &amp; Exercise Scientist</td>
</tr>
</tbody>
</table>

2.6 Use of Maths and English within the curriculum

Those working within the Sport & Exercise Science sector cannot just rely on their technical skills and must ensure they develop all relevant employability skills to increase employment opportunities. For example, they will be required to communicate appropriately with stakeholders throughout their career, so the ability to use Maths and English in a professional context is an essential employability skill that must be developed at all levels of study.

Development of essential Maths and English skills are embedded throughout these qualifications in accordance with industry requirements and below are some examples of how these skills are developed in the BTEC Higher National curriculum:

- Written reports
- Formal presentations
- Informal conversations
- Use of professional, sector specific language
Some aspects of Sport & Exercise Science require high level Maths skills and we strongly recommend all students complete diagnostic maths assessments preferably before beginning a Higher National course, as well as having an A* to C grade and/or 9 to 4 in GCSE Maths (or equivalent) prior to starting the course (see Entry Requirements in section 3.2 of this specification).

2.7 How Pearson BTEC Higher Nationals in Sport & Exercise Science provide both transferable employability skills and academic study skills

Students need both relevant qualifications and employability skills to enhance their career prospects and contribute to their personal development. Pearson Higher National Sport & Exercise Science qualifications embed throughout the programme the development of key skills, attributes and strengths required by 21st century employers.

Where employability skills are referred to in this specification, this generally refers to skills in five main categories:

- **Cognitive and problem-solving skills**: critical thinking, approaching non-routine problems by applying expert and creative solutions, use of systems and digital technology, generating and communicating ideas creatively.

- **Intra-personal skills**: self-management, adaptability and resilience, self-monitoring and self-development, self-analysis and reflection, planning and prioritising.

- **Interpersonal skills**: effective communication and articulation of information, working collaboratively, negotiating and influencing, self-presentation.

- **Commercial skills**: sector awareness; sales; marketing/promotion; budget management/monitoring;

- **Business skills**: awareness of types of companies, company formation, invoicing, calculating fees, business management.

Pearson Example Assessment Briefs make recommendations for a range of real or simulated assessment activities, for example, groupwork where appropriate, to encourage development of collaborative and interpersonal skills or a solution-focused case study to provide the opportunity to develop cognitive skills. There are specific requirements for the assessment of these skills, as relevant, within the assessment grids for each unit. Example Assessment Briefs are for guidance and support only and can be customised and amended according to localised needs and requirements. All assignments must still be verified as per the internal verification process.
Students can also benefit from opportunities for deeper learning, where they are able to make connections between units and select areas of interest for detailed study. In this way BTEC Higher Nationals provide a vocational context in which students can develop the knowledge and academic study skills required for progression to university degree courses, including:

- Active research skills
- Effective writing skills
- Analytical skills
- Critical thinking
- Creative problem-solving
- Decision-making
- Team building
- Exam preparation skills
- Digital literacy
- Competence in assessment methods used in higher education.

To support you in developing these skills in your students, we have developed a map of Higher Education relevant transferable and academic study skills, available in appendices (See appendix 1).
3 Planning your programme

3.1 Delivering the Higher Nationals in Sport & Exercise Science

You play a central role in helping your students to choose the right BTEC Higher National qualification.

You should assess your students very carefully to ensure that they take the right qualification and the right pathways or optional units, to allow them to progress to the next stage. You should check the qualification structures and unit combinations carefully when advising students.

You will need to ensure that your students have access to a full range of information, advice and guidance in order to support them in making the necessary qualification and unit choices. When students are recruited, you need to give them accurate information on the title and focus of the qualification for which they are studying.

Unit resourcing

Please be aware that some units within this programme will require some specialist equipment and/or resources, e.g. Unit 9: Biomechanics, Unit 33: Strength & Conditioning for Coaching.

When planning your programme please take these requirements into consideration and ensure students have access to the required resources.

3.2 Entry requirements and admissions

Although Pearson do not specify formal entry requirements, as a centre it is your responsibility to ensure that the students you recruit have a reasonable expectation of success on the programme.

For students who have recently been in education, the entry profile is likely to include one of the following:

- A BTEC Level 3 qualification in Sport or Sport & Exercise Science
- A GCE Advanced Level profile that demonstrates strong performance in a relevant subject or adequate performance in more than one GCE subject. This profile is likely to be supported by GCSE grades A* to C (or equivalent) and/or 9 to 4 (or equivalent) in subjects such as maths and English
- Other related Level 3 qualifications
- An Access to Higher Education Diploma awarded by an approved further education institution
- Related work experience
- An international equivalent of the above.
Centres may wish to consider applicants' prior learning when considering their acceptance on a BTEC Higher Nationals, through Recognition of Prior Learning. (For further information please refer to section 8 of this document).

3.2.1 English language requirements for Higher Nationals

Pearson’s mission is to help people make progress in their lives through learning. In order to do this it is critical that students who are taught and assessed in English have the necessary language skills they need to be successful on Pearson BTEC Higher National qualifications.

To assist centres to recruit students who have the skills to benefit from undertaking a Higher National programme of study, we are providing the following clarification regarding the English language admission requirements when offering places to applicants.

All centres delivering Pearson BTEC Higher National qualifications in English must ensure that each applicant can demonstrate their capability to learn and be assessed at the relevant level in English. The standard that Pearson believes must be demonstrated for a student to be successful are equivalent to:

Common European Framework of Reference (CEFR) level B2; or
Pearson Test of English Academic (PTE Academic) 42; or
Pearson Test of English General (PTE) Level 3; or
Pearson Versant English Test 58-68; or
International English Language Testing System (IELTS) 5.5; with both Reading and Writing elements at 5.5; or
Having recently\(^1\) completed a formal programme of study in English at an appropriate level (such as a level 3 BTEC or ‘A’ level) prior to starting their Higher National

\(^1\) We would usually expect this to be within the past two years
The table below shows when Pearson expects these standards to apply:

<table>
<thead>
<tr>
<th>Centre location</th>
<th>Language of delivery and/or assessment</th>
<th>When we expect the English language standards to apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK or Internationally</td>
<td>Wholly delivered and assessed in English</td>
<td>Prior to admission</td>
</tr>
<tr>
<td>UK or Internationally</td>
<td>Partially delivered and assessed in English</td>
<td>Prior to admission</td>
</tr>
<tr>
<td>UK or Internationally</td>
<td>No element is delivered or assessed in English²</td>
<td>Does not apply</td>
</tr>
</tbody>
</table>

Centres’ admissions processes must ensure that students can demonstrate their capability in English, equivalent to the standards highlighted above. While we have highlighted several standardised tests (as an easy way of demonstrating this) centres are free to test the English proficiency of their applicants in any suitable way.

However, centres must be able to provide evidence to Pearson as to how any other assessments used (other than those specified) ensures that their applicants have demonstrated appropriate English capability prior to starting their Higher National programme.

This evidence should include admissions records (including any evidence provided by applicants and records of the admissions decisions made) as well as evidence of ongoing monitoring of students, if required. A centre should retain this evidence for at least three years, from the point of the student's admission/enrolment, to enable scrutiny of the centre's admissions process through Pearson's quality assurance procedures.

² If a centre is delivering qualifications in languages other than English, they must adhere to Pearson's Use of Language in Qualifications policy that can be found in the support section, under Policies for centres, learners and employees on our website [http://qualifications.pearson.com](http://qualifications.pearson.com)
3.2.2 Centre approval
To ensure that centres are ready to assess students and that we can provide the support that is needed all centres must be approved before they can offer these qualifications. For more information about becoming a centre and seeking approval to run our qualifications please visit the support section on our website (http://qualifications.pearson.com/).

3.2.3 Level of sector knowledge required
We do not set any requirements for tutors, but we do recommend that centres assess the overall skills and knowledge of the teaching team, which should be relevant, up to date and at the appropriate level.

3.2.4 Resources required
As part of your centre approval, you will need to show that the necessary material resources and work spaces are available to deliver BTEC Higher Nationals. For some units, specific resources are required, this is clearly indicated in the unit descriptors.

3.2.5 HN Global support
HN Global is an online resource that supports centre planning and delivery of BTEC Higher Nationals by providing appropriate teaching and learning resources. For further information see Sections 5 and 6 of this Programme Specification.

3.2.6 Modes of delivery
Subject to approval by Pearson, centres are free to deliver BTEC Higher Nationals using modes of delivery that meet the needs of their students. We recommend making use of a wide variety of modes, including:
- Full-time
- Part-time
- Blended learning.

3.2.7 Recommendations for employer engagement
BTEC Higher Nationals are vocational qualifications and as an approved centre you are encouraged to work with employers on the design, delivery and assessment of the course. This will ensure that students enjoy a programme of study that is engaging and relevant, and which equips them for progression. There are suggestions in section 5.2 about how employers could become involved in delivery and/or assessment, but these are not intended to be exhaustive and there will be other possibilities at a local level.
3.2.8 Support from Pearson
We provide a range of support materials, including Schemes of Work and Example Assessment Briefs, with supporting templates. You will be allocated an External Examiner early in the planning stage, to support you with planning your assessments, and there will be training events and support from our Subject Leads.

3.2.9 Student employability
All BTEC Higher Nationals have been designed and developed with consideration of National Occupational Standards, where relevant, and have been mapped to subject benchmarks. (see Appendix 6).

Employability skills such as team working and entrepreneurialism as well as practical hands-on skills have been built into the design of the learning aims and content. This gives you the opportunity to use relevant contexts, scenarios and materials to enable students to develop a portfolio of evidence demonstrating the breadth of their skills and knowledge in a way that equips them for employment.

3.2.10 Importance of work experience
Work experience is fundamental in the development of effective professional practice, learning and progression in this sector, therefore the assessment of learning on, or through, work experience is a key requirement of this qualification and should be actively encouraged/integrated as part of good practice.
There are many examples and models of how to go about embedding work experience in your unit delivery. Here are some suggestions:

<table>
<thead>
<tr>
<th>UNIT</th>
<th>WORK EXPERIENCE PROPOSAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 5: Coaching Practice &amp; Skill Development</td>
<td>Students are tasked to experience working with different groups (e.g. young, performance). They could get involved with different clubs to experience the different focuses of skill development. Using contrasting groups could allow them see the changes in sessions and they could incorporate that into their planning of practical sessions for assessment.</td>
</tr>
<tr>
<td>Unit 9: Biomechanics</td>
<td>Students could help local clubs to develop athletes’ performance by analysing team and individual techniques and skills. Their findings could help managers and coaches tailor coaching sessions to meet athletes’ needs.</td>
</tr>
<tr>
<td>Unit 13: Sports Massage</td>
<td>Students could provide massage for sports teams within the centre as part of a clinic-based, pre- and post-event massage experience. Students could also work with local level sports clubs and provide massage for players.</td>
</tr>
<tr>
<td>Unit 18: Exercise Prescription</td>
<td>Student could work with local leisure centres that are providing health promotion interventions.</td>
</tr>
<tr>
<td>Unit 21: Sport &amp; Exercise for Specific Groups</td>
<td>Student could work with local leisure centres that are providing health promotion interventions.</td>
</tr>
<tr>
<td>Unit 33: Strength &amp; Conditioning for Coaching</td>
<td>Students could do work experience at different places (e.g. health clubs, gymnasiums, local clubs), assisting the strength &amp; conditioning coach, fitness instructor and personal trainer planning and delivering training sessions for athletes and individuals (under supervision).</td>
</tr>
</tbody>
</table>
3.3 Access to study

This section focuses on the administrative requirements for delivering a BTEC Higher National qualification. It will be of value to Quality Nominees, Programme Leaders and Examinations Officers.

Our policy regarding access to our qualifications is that:

- They should be available to everyone who is capable of reaching the required standards
- They should be free from any barriers that restrict access and progression.

There should be equal opportunities for all those wishing to access the qualifications. We refer Centres to our Pearson Equality and Diversity Policy, which can be found in the support section of our website (http://qualifications.pearson.com/).

Centres are required to recruit students to Higher National programmes with integrity. They will need to make sure that applicants have relevant information and advice about the qualification, to make sure it meets their needs. Centres should review the applicant’s prior qualifications and/or experience to consider whether this profile shows that they have the potential to achieve the qualification. For students with disabilities and specific needs, this review will need to take account of the support available to the student during the teaching and assessment of the qualification. For further guidance and advice please refer to Section 9 on reasonable adjustments.

3.4 Student registration and entry

All students should be registered for the qualification, and appropriate arrangements made for internal and external verification. For information on making registrations for the qualification, you will need to refer to the information manual available in the support section of our website (http://qualifications.pearson.com/).

Students can be formally assessed only for a qualification on which they are registered. If students’ intended qualifications change (for example, if a student decides to choose a different specialist pathway), then the centre must transfer the student to the chosen pathway appropriately. Please note that student work cannot be sampled if the student is not registered or is registered on an incorrect pathway.

3.5 Access to assessments

Assessments need to be administered carefully, to ensure that all students are treated fairly, and that results and certification are issued on time, allowing students to move on to chosen progression opportunities.
Our equality policy requires that all students should have equal opportunity to access our qualifications and assessments, and that our qualifications are awarded in a way that is fair to every student. We are committed to making sure that:

- Students with a protected characteristic (as defined in legislation) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to students who do not share that characteristic.
- All students achieve the recognition they deserve for undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

Further information on access arrangements can be found on the Joint Council for Qualifications website (http://www.jcq.org.uk/).

### 3.6 Administrative arrangements for internal assessment

#### 3.6.1 Records
You are required to retain records of assessment for each student. Records should include assessments taken, decisions reached and any adjustments or appeals. Further information on quality and assessment can be found in our UK and international guides available in the support section on our website (http://qualifications.pearson.com/). We may ask to audit your records, so they must be retained as specified. All student work must be retained for a minimum of 12 weeks after certification has taken place.

#### 3.6.2 Reasonable adjustments to assessment
A reasonable adjustment is one that is made before a student takes an assessment, to ensure that he or she has fair access to demonstrate the requirements of the assessments.

You are able to make adjustments to internal assessments to take account of the needs of individual students. In most cases this can be achieved through a defined time extension or by adjusting the format of evidence. We can advise you if you are uncertain as to whether an adjustment is fair and reasonable. You need to plan for time to make adjustments, if necessary.

Further details on how to make adjustments for students with protected characteristics are available on the support section of our website (http://qualifications.pearson.com/).
3.6.3 Special consideration

Special consideration is given after an assessment has taken place for students who have been affected by adverse circumstances, such as illness, and require an adjustment of grade to reflect normal level of attainment. You must operate special consideration in line with Pearson policy (see previous paragraph). You can provide special consideration related to the period of time given for evidence to be provided, or for the format of the assessment (if it is equally valid). You may not substitute alternative forms of evidence to that required in a unit, or omit the application of any assessment criteria to judge attainment. Pearson can consider applications for special consideration in line with the policy, which can be found in the document linked above.

Please note that your centre must have a policy for dealing with mitigating circumstances if students are affected by adverse circumstances, such as illness, which result in non-submission or late submission of assessment.

3.6.4 Appeals against assessment

Your centre must have a policy for dealing with appeals from students. These appeals may relate to assessment decisions being incorrect or assessment not being conducted fairly. The first step in such a policy could be a consideration of the evidence by a Programme Leader or other member of the programme team. The assessment plan should allow time for potential appeals after assessment decisions have been given to students. If there is an appeal by a student, you must document the appeal and its resolution. Students have a final right of appeal to Pearson, but only if the procedures that you have put in place have been followed.

Further details of our policy on enquiries and appeals is available on the support section of our website (http://qualifications.pearson.com/).

If your centre is located in England or Wales and the student is still dissatisfied with the final outcome of their appeal they can make a further appeal to the Office of the Independent Adjudicator (OIA) by emailing: enquiries@oiahe.org.uk. In Northern Ireland a further appeal may be lodged with the Northern Ireland Public Service Ombudsman (NIPSO) by emailing: nipso@nipso.org.uk.

3.7 Dealing with malpractice in assessment

'Malpractice' means acts that undermine the integrity and validity of assessment, the certification of qualifications and/or may damage the authority of those responsible for delivering the assessment and certification.

Pearson does not tolerate actual or attempted actions of malpractice by learners, centre staff or centres in connection with Pearson qualifications. Pearson may impose penalties and/or sanctions on learners, centre staff or centres where malpractice or attempted malpractice has been proven.
Malpractice may occur or be suspected in relation to any unit or type of assessment within a qualification. For further details on malpractice and advice on preventing malpractice by learners, please see Pearson's Centre Guidance: Dealing with Malpractice, available on our website.

The procedures we ask you to adopt vary between units that are internally assessed and those that are externally assessed.

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Learners must be given information that explains what malpractice is for internal assessment and how suspected incidents will be dealt with by the centre. The Centre Guidance: Dealing with Malpractice document gives full information on the actions we expect you to take.

Pearson may conduct investigations if we believe a centre is failing to conduct internal assessment according to our policies. The above document gives further information and examples, and details the penalties and sanctions that may be imposed.

In the interests of learners and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

3.7.1 Internally assessed units

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Students must be given information that explains what malpractice is for internal assessment and how suspected incidents will be dealt with by the Centre. Full information on dealing with malpractice and the actions we expect you to take is available on the support section of our website (http://qualifications.pearson.com/).

Pearson may conduct investigations if it is believed that a Centre is failing to conduct internal assessment according to Pearson policies. The above document gives further information, provides examples, and details the penalties and sanctions that may be imposed.

3.7.2 Student malpractice

The head of centre is required to report incidents of suspected learner malpractice that occur during Pearson qualifications. We ask centres to complete JCQ Form M1 (www.jcq.org.uk/malpractice) and email it with any accompanying documents (signed statements from the learner, invigilator, copies of evidence, etc) to the Investigations Processing team at candidatemalpractice@pearson.com. The responsibility for determining appropriate sanctions or penalties to be imposed on learners lies with Pearson.
Learners must be informed at the earliest opportunity of the specific allegation and the centre's malpractice policy, including the right of appeal. Learners found guilty of malpractice may be disqualified from the qualification for which they have been entered with Pearson.

Failure to report malpractice constitutes staff or centre malpractice.

3.7.3 Staff and centre malpractice

The head of centre is required to inform Pearson's Investigations team of any incident of suspected malpractice (which includes maladministration) by centre staff, before any investigation is undertaken. The head of centre is requested to inform the Investigations team by submitting a JCQ M2 Form (downloadable from www.jcq.org.uk/malpractice) with supporting documentation to pqsmalpractice@pearson.com. Where Pearson receives allegations of malpractice from other sources (for example Pearson staff, anonymous informants), the Investigations team will conduct the investigation directly or may ask the head of centre to assist.

Pearson reserves the right in cases of suspected malpractice to withhold the issuing of results/certificates while an investigation is in progress. Depending on the outcome of the investigation, results and/or certificates may not be released or they may be withheld.

We reserve the right to withhold certification when undertaking investigations, audits and quality assurance processes. You will be notified within a reasonable period of time if this occurs.

3.7.4 Sanctions and appeals

Where malpractice is proven, we may impose sanctions or penalties, such as:

- mark reduction for affected external assessments
- disqualification from the qualification
- debarment from registration for Pearson qualifications for a period of time.

If we are concerned about your centre's quality procedures we may impose sanctions such as:

- working with centres to create an improvement action plan
- requiring staff members to receive further training
- placing temporary suspensions on certification of learners
- placing temporary suspensions on registration of learners
- debarring staff members or the centre from delivering Pearson qualifications
- suspending or withdrawing centre approval status.
The centre will be notified if any of these apply.

Pearson has established procedures for centres that are considering appeals against penalties and sanctions arising from malpractice. Appeals against a decision made by Pearson will normally be accepted only from the head of centre (on behalf of learners and/or members or staff) and from individual members (in respect of a decision taken against them personally). Further information on appeals can be found in the JCQ Appeals booklet (https://www.jcq.org.uk/exams-office/appeals).
4 Programme structure

4.1 Units, Credits, Total Qualification Time (TQT) and Guided Learning (GL)

The Higher National Certificate (HNC) is a Level 4 qualification made up of 120 credits. It is usually studied full-time over one year, or part-time over two years.

The Higher National Diploma (HND) is a Level 4 and Level 5 qualification made up of 240 credits. It is usually studied full-time over two years, or part-time over four years.

Pearson would expect that an HND student would have achieved at least 90 credits at Level 4 before progressing to Level 5 units. This allows for the students to submit the remaining 30 credits at Level 4 while undertaking their Level 5 study.

Students undertaking an HND who fail to successfully complete the full qualification may be awarded an HNC, if their credit achievement permits.

BTEC Higher Nationals consist of core units, specialist units and optional units:

- Core units are mandatory
- Specialist units are designed to provide a specific occupational focus to the qualification and are aligned to Professional Body standards
- Required combinations of units are clearly set out in the tables below.

All units are usually 15 credits in value, or a multiple thereof. These units have been designed from a learning time perspective, and are expressed in terms of Total Qualification Time (TQT). TQT is an estimate of the total amount of time that could reasonably be expected to be required for a student to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification. TQT includes undertaking each of the activities of Guided Learning, Directed Learning and Invigilated Assessment. Each 15 credit unit approximates to a Total Unit Time of 150 hours and 60 hours of Guided Learning.

**Total Qualification Time (TQT)** Higher National Certificate (HNC) = 1,200

**Total Qualification Time (TQT)** Higher National Diploma (HND) = 2,400

Examples of activities which can contribute to Total Qualification Time include:

- Guided Learning
- Independent and unsupervised research/learning
- Unsupervised compilation of a portfolio of work experience
- Unsupervised e-learning
- Unsupervised e-assessment
- Unsupervised coursework
- Watching a pre-recorded podcast or webinar
- Unsupervised work-based learning.

**Guided Learning (GL)** is defined as the time when a tutor is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. Guided Learning includes any supervised assessment activity; this includes invigilated examination and observed assessment and observed work-based practice.

**Total Guided Learning (GL)** Higher National Certificate (HNC) = 480 hours
**Total Guided Learning (GL)** Higher National Diploma (HND) = 960 hours

Some examples of activities which can contribute to Guided Learning include:
- Classroom-based learning supervised by a tutor
- Work-based learning supervised by a tutor
- Live webinar or telephone tutorial with a tutor in real time
- E-learning supervised by a tutor in real time
- All forms of assessment which take place under the immediate guidance or supervision of a tutor or other appropriate provider of education or training, including where the assessment is competence-based and may be turned into a learning opportunity.

### 4.2 Programme structures

The programme structures specify:
- The total credit value of the qualification
- The minimum credit to be achieved at the level of the qualification
- The core units
- The specialist units
- The optional units
- The maximum credit value in units that can be centre commissioned.

When combining units for a Pearson Higher National qualification, it is the centre's responsibility to make sure that the correct combinations are followed.
4.2.1 Unit numbering

A number of units within the Pearson BTEC Higher National in Sport qualification also appear in the BTEC Higher National in Sport & Exercise qualification. While the content and unit codes of these units are identical, the unit numbers are different.

<table>
<thead>
<tr>
<th>UNIT TITLE</th>
<th>UNIT CODE</th>
<th>UNIT NUMBER</th>
<th>HNC Sport &amp; Exercise Science</th>
<th>HNC Sport</th>
<th>HND Sport &amp; Exercise Science</th>
<th>HND Sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>Y/616/0950</td>
<td>1</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Activity, Lifestyle &amp; Health</td>
<td>J/616/0930</td>
<td>7</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biomechanics</td>
<td></td>
<td>9</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy &amp; Physiology</td>
<td>D/616/0951</td>
<td>3</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology in Sport</td>
<td>K/616/0953</td>
<td>10</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Project</td>
<td>L/616/0962</td>
<td>14</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurism in Sport</td>
<td>R/616/0963</td>
<td>30</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Analysis</td>
<td>M/616/1053</td>
<td>16</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Literacy</td>
<td>L/616/1058</td>
<td>23</td>
<td>33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Coaching</td>
<td>J/616/1060</td>
<td>15</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Practice</td>
<td>L/616/1061</td>
<td>29</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal &amp; Professional Development</td>
<td>Y/616/1063</td>
<td>24</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Experience</td>
<td>H/616/1065</td>
<td>25</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise Physiology</td>
<td>M/616/1067</td>
<td>26</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Nutrition</td>
<td>J/616/1074</td>
<td>27</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2.2 Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science

- Qualification credit value: a minimum of 120 credits. This is made up of eight units, each with a value of 15 credits.

- **Total Qualification Time (TQT)** Higher National Certificate (HNC) = 1,200

- **Total Guided Learning (GL)** Higher National Certificate (HNC) = 480

- There is a required mix of Core, Specialist and Optional units totalling 120 credits. All units are at Level 4.

- In some cases a maximum of 30 credits from a Higher National qualification may be from units designed by the centre and approved by Pearson. Core units may not be substituted and are mandatory. For more information please refer to Higher National Commissioned Qualifications.

- Please note that some Specialist units are available as Optional units and some Optional units are available as Specialist units.

The Level 4 Higher National Certificate consists of 120 credits at Level 4 delivered via the General Sport & Exercise Science pathway or one of the following two Specialist pathways:

- Coaching Science
- Exercise, Health & Lifestyle.
<table>
<thead>
<tr>
<th>Core Unit</th>
<th>Mandatory</th>
<th>Unit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Nutrition</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>2 Fundamentals of Sport &amp; Exercise Psychology</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>3 Anatomy &amp; Physiology</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4 Professional Skills (Pearson-set)</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus an additional four Optional units selected from the Specialist and Optional units given below.

*Please note that only one Specialist unit can be selected from each Specialist pathway group.

### Group: Coaching Science

<table>
<thead>
<tr>
<th>Specialist Unit</th>
<th></th>
<th>15</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Coaching Practice &amp; Skill Development</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>6 Training, Fitness, Testing</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

### Group: Exercise, Health & Lifestyle

<table>
<thead>
<tr>
<th>Specialist Unit</th>
<th></th>
<th>15</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Physical Activity, Lifestyle &amp; Health</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>8 Lifestyle Coaching</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

### Optional Units

<table>
<thead>
<tr>
<th>Optional Unit</th>
<th></th>
<th>15</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Biomechanics</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>10 Technology in Sport</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>11 Injury Prevention</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>12 Community Coaching</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>13 Sports Massage</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Core Unit</td>
<td>Mandatory</td>
<td>Unit credit</td>
<td>Level</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>1 Nutrition</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>2 Fundamentals of Sport &amp; Exercise Psychology</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>3 Anatomy &amp; Physiology</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4 Professional Skills (Pearson-set)</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>5 Coaching Practice &amp; Skill Development</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>6 Training, Fitness, Testing</td>
<td></td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

**Specialist Unit Mandatory**

| 7 Physical Activity, Lifestyle & Health |            | 15          | 4     |
| 8 Lifestyle Coaching |            | 15          | 4     |

**Optional Units**

| 9 Biomechanics |            | 15          | 4     |
| 10 Technology in Sport |            | 15          | 4     |
| 11 Injury Prevention |            | 15          | 4     |
| 12 Community Coaching |            | 15          | 4     |
| 13 Sports Massage |            | 15          | 4     |

*Please note that only one Specialist unit can be selected from each Specialist pathway group.*
# Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science (Exercise, Health & Lifestyle)

<table>
<thead>
<tr>
<th>Core Unit</th>
<th>Mandatory</th>
<th>Unit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Nutrition</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2 Fundamentals of Sport &amp; Exercise Psychology</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3 Anatomy &amp; Physiology</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4 Professional Skills (Pearson-set)</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialist Unit</th>
<th>Mandatory</th>
<th>Unit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Coaching Practice &amp; Skill Development</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6 Training, Fitness, Testing</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

## Plus an additional two Optional units selected from the Specialist and Optional units given below.

*Please note that only one Specialist unit can be selected from each Specialist pathway group.*

### Group: Coaching Science

<table>
<thead>
<tr>
<th>Specialist Unit</th>
<th>Unit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Biomechanics</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>10 Technology in Sport</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>11 Injury Prevention</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>12 Community Coaching</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>13 Sports Massage</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>
4.2.3 Pearson BTEC Level 5 Higher National Diploma in Sport and Exercise Science

The Level 5 Higher National Diploma consists of the Level 4 Higher National Certificate (above) plus an additional 120 credits at Level 5 delivered via the General Sport & Exercise Science pathway or one of the following two Specialist pathways:

- Coaching Science
- Exercise, Health & Lifestyle.

Qualification credit value: a minimum of 240 credits, of which 120 credits are at Level 5, and 120 credits are at Level 4 and usually attained via the HNC.

There is a required mix of Core, Specialist and Optional units totalling 240 credits. The Core unit required for each Level 5 Specialist pathway (in addition to the Specialist units) is Unit 14: Research Project, which is weighted at 30 credits.

The requirements of the Higher National Certificate (or equivalent) have to be met. In some cases a maximum of 60 credits can be imported from another RQF Pearson BTEC Higher National qualification and/or from units designed by the centre and approved by Pearson. Core units and specialist units may not be substituted.
### Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science

<table>
<thead>
<tr>
<th>Level 4 Units</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Unit <strong>Mandatory</strong> 1 Nutrition</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Core Unit <strong>Mandatory</strong> 2 Fundamentals of Sport &amp; Exercise Psychology</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Core Unit <strong>Mandatory</strong> 3 Anatomy &amp; Physiology</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Core Unit <strong>Mandatory</strong> 4 Professional Skills (Pearson-set)</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus an additional four Optional Units selected from the Specialist and Optional units given below.

*Please note that only one Specialist Unit can be selected from each Specialist pathway group.*

#### Group: Coaching Science

<table>
<thead>
<tr>
<th>Specialist Unit</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Coaching Practice &amp; Skill Development</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>6 Training, Fitness, Testing</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Group: Exercise, Health & Lifestyle

<table>
<thead>
<tr>
<th>Specialist Unit</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Physical Activity, Lifestyle &amp; Health</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>8 Lifestyle Coaching</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Optional Units

<table>
<thead>
<tr>
<th>Optional Unit</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Biomechanics</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>10 Technology in Sport</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>11 Injury Prevention</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>12 Community Coaching</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>13 Sports Massage</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>
### Level 5 Units

<table>
<thead>
<tr>
<th>Core Unit</th>
<th>14 Research Project (Pearson-set)</th>
<th>30</th>
<th>5</th>
</tr>
</thead>
</table>

Plus an additional six Optional units selected from the Specialist and Optional units given below.

*Please note that only one Specialist unit can be selected from each Specialist pathway group.*

#### Optional Level 5 Units

##### Group: Coaching Science

| Specialist Unit | 15 Advanced Coaching | 15 | 5 |
| Specialist Unit | 16 Performance Analysis | 15 | 5 |
| Specialist Unit | 17 Talent Identification & Development | 15 | 5 |

##### Group: Exercise, Health & Lifestyle

| Specialist Unit | 18 Exercise Prescription | 15 | 5 |
| Specialist Unit | 19 Contemporary Issues in Health | 15 | 5 |
| Specialist Unit | 20 Health Community Engagement | 15 | 5 |
| Specialist Unit | 21 Sport & Exercise for Specific Groups | 15 | 5 |

##### Optional Units

<p>| Optional Unit | 22 Physical Education &amp; School Sport | 15 | 5 |
| Optional Unit | 23 Physical Literacy | 15 | 5 |
| Optional Unit | 24 Personal &amp; Professional Development | 15 | 5 |
| Optional Unit | 25 Work Experience | 15 | 5 |
| Optional Unit | 26 Exercise Physiology | 15 | 5 |
| Optional Unit | 27 Advanced Nutrition | 15 | 5 |
| Optional Unit | 28 Leadership &amp; Management | 15 | 5 |
| Optional Unit | 29 Teaching Practice | 15 | 5 |
| Optional Unit | 30 Entrepreneurism in Sport | 15 | 5 |
| Optional Unit | 31 Biochemistry of Exercise | 15 | 5 |
| Optional Unit | 32 Psychology for Performance | 15 | 5 |
| Optional Unit | 33 Strength &amp; Conditioning for Coaching | 15 | 5 |
| Optional Unit | 34 Innovation in Coaching | 15 | 5 |
| Optional Unit | 35 Contemporary Issues in Coaching | 15 | 5 |
| Optional Unit | 36 Applied Lifestyle Coaching | 15 | 5 |
| Optional Unit | 37 Sport Rehabilitation | 15 | 5 |</p>
<table>
<thead>
<tr>
<th>Core Unit</th>
<th>Credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Nutrition</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>2 Fundamentals of Sport &amp; Exercise Psychology</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>3 Anatomy &amp; Physiology</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4 Professional Skills (Pearson-set)</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>5 Coaching Practice &amp; Skill Development</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>6 Training, Fitness, Testing</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>7 Physical Activity, Lifestyle &amp; Health</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>8 Lifestyle Coaching</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>9 Biomechanics</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>10 Technology in Sport</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>11 Injury Prevention</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>12 Community Coaching</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>13 Sports Massage</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

**Level 4 Units**

**Mandatory**

**Core Unit**

Level 4 Units

**Specialist Unit**

**Mandatory**

**Group: Exercise, Health & Lifestyle**

**Specialist Unit**

**Optional Units**

*Please note that only one Specialist unit can be selected from each Specialist pathway group.*
<table>
<thead>
<tr>
<th>Level 5 Units</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Research Project (Pearson-set)</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Advanced Coaching</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Performance Analysis</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandatory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Talent Identification &amp; Development</td>
<td>15</td>
<td>5</td>
</tr>
</tbody>
</table>

Plus an additional three Optional units selected from the Specialist and Optional units given below.

*Please note that only one Specialist unit can be selected from each Specialist pathway group.

**Group: Exercise, Health & Lifestyle**

<table>
<thead>
<tr>
<th>Optional Units</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Exercise Prescription</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Contemporary Issues in Health</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Health Community Engagement</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Sport &amp; Exercise for Specific Groups</td>
<td>15</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional Units</th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Physical Education &amp; School Sport</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Physical Literacy</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Personal &amp; Professional Development</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Work Experience</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 Exercise Physiology</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 Advanced Nutrition</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Leadership &amp; Management</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Teaching Practice</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 Entrepreneurism in Sport</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 Biochemistry of Exercise</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 Psychology for Performance</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 Strength &amp; Conditioning for Coaching</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 Innovation in Coaching</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>35 Contemporary Issues in Coaching</td>
<td>15</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>36 Applied Lifestyle Coaching</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>37 Sport Rehabilitation</td>
<td>15</td>
</tr>
</tbody>
</table>
### Pearson BTEC Level 5 Higher National Diploma in Sport (Exercise, Health & Lifestyle)

<table>
<thead>
<tr>
<th></th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 4 Units</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Core Unit Mandatory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Nutrition</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>2 Fundamentals of Sport &amp; Exercise Psychology</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>3 Anatomy &amp; Physiology</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>4 Professional Skills (Pearson-set)</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td><strong>Specialist Unit Mandatory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Physical Activity, Lifestyle &amp; Health</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>8 Lifestyle Coaching</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td><strong>Optional Units</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Biomechanics</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>10 Technology in Sport</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>11 Injury Prevention</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>12 Community Coaching</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>13 Sports Massage</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

### Group: Coaching Science

<table>
<thead>
<tr>
<th></th>
<th>Unit credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specialist Unit Mandatory</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Coaching Practice &amp; Skill Development</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>6 Training, Fitness, Testing</td>
<td>15</td>
<td>4</td>
</tr>
</tbody>
</table>

*Please note that only one Specialist unit can be selected from each Specialist pathway group.*
<table>
<thead>
<tr>
<th>Level 5 Units</th>
<th>Unit Credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Mandatory</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Research Project (Pearson-set)</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td><strong>Specialist Unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Mandatory</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Exercise Prescription</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>19 Contemporary Issues in Health</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>20 Health Community Engagement</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td><strong>Specialist Unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Mandatory</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Sport &amp; Exercise for Specific Groups</td>
<td>15</td>
<td>5</td>
</tr>
</tbody>
</table>

Plus an additional two Optional units selected from the Specialist and Optional units given below.

*Please note that only one Specialist unit can be selected from each Specialist pathway group.*

### Group: Coaching Science

<table>
<thead>
<tr>
<th></th>
<th>Unit Credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialist Unit</td>
<td>15 Advanced Coaching</td>
<td>15</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td>16 Performance Analysis</td>
<td>15</td>
</tr>
<tr>
<td>Specialist Unit</td>
<td>17 Talent Identification &amp; Development</td>
<td>15</td>
</tr>
</tbody>
</table>

### Optional Units

<table>
<thead>
<tr>
<th></th>
<th>Unit Credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Unit</td>
<td>22 Physical Education &amp; School Sport</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>23 Physical Literacy</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>24 Personal &amp; Professional Development</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>25 Work Experience</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>26 Exercise Physiology</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>27 Advanced Nutrition</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>28 Leadership &amp; Management</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>29 Teaching Practice</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>30 Entrepreneurism in Sport</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>31 Biochemistry of Exercise</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>32 Psychology for Performance</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>33 Strength &amp; Conditioning for Coaching</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>34 Innovation in Coaching</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>35 Contemporary Issues in Coaching</td>
<td>15</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>36 Applied Lifestyle Coaching</td>
<td>15</td>
</tr>
<tr>
<td>Optional Unit</td>
<td>37 Sport Rehabilitation</td>
<td>15</td>
</tr>
</tbody>
</table>
4.2.4 Meeting local needs (MLN)

Centres should note that Pearson BTEC Higher National qualifications have been developed in consultation with centres, employers and relevant professional organisations. The units were designed to meet the skill needs of the sector and thereby allow coverage of the full range of employment within the sector. Centres should make maximum use of the choices available to them within the specialist pathways to meet the needs of their students, as well as the local skills and training needs.

Where centres identify a specific need that cannot be addressed using the units in this specification, centres can seek approval to use units from other RQF Pearson BTEC Higher National qualifications, through the MLN process (refer to Commissioned qualification design and validation service of our website http://qualifications.pearson.com or get in touch your Pearson regional contact for application details. Centres will need to justify the rationale for importing units from other RQF Pearson BTEC Higher National specifications. Meeting local need applications must be made in advance of delivery and before 31 January in the year of student registration.

The flexibility to import standard units from other RQF Pearson BTEC Higher National specifications is limited to a maximum of 30 credits in a BTEC HNC qualification and a maximum of 60 credits in a BTEC HND qualification (30 credits at Level 4 and 30 credits at Level 5). This is an overall maximum of units that can be imported. MLN units cannot be used at the expense of the mandatory units in any qualification nor can the qualification's rules of combination, as detailed in the specification, be compromised. It is the responsibility of the centre requesting the MLN to ensure that approved units are used only in eligible combinations.

For the Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science and Pearson BTEC Level 5 Higher National Diploma in Sport & Exercise Science, the maximum number of credits that can be imported by pathway are as follows:

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Pathway</th>
<th>Import at Level 4</th>
<th>Import at Level 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>HNC Sport &amp; Exercise Science</td>
<td>Coaching Science</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exercise, Lifestyle &amp; Health</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>HND Sport &amp; Exercise Science</td>
<td>Coaching Science</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Exercise, Lifestyle &amp; Health</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>
4.2.5 Pearson BTEC Higher National Commissioned Development

Where MLN does not provide enough flexibility in terms of qualification structure, centres can request design and development of units by Pearson to meet their specific needs. This is offered by the following types of developments; full commission or partial commission.

We would be pleased to discuss your ideas for a Pearson BTEC Higher National Commissioned Development. For more information please refer to the Commissioned qualification design and validation service on our website http://qualifications.pearson.com

Once the centre is ready to proceed with a commissioned development, an application must be made, which provides a clear rationale for the development request. Pearson will review the application and may confirm or deny the request. The commissioned unit(s) will be authored by Pearson, in full consultation within the commissioning centre. Applications must be made one year in advance of the first year of commissioned unit(s) delivery.

4.3 Pearson-set Assignments

There are Pearson-set assignments, as part of the core units. Each year, Pearson will issue a Theme and (for Level 4) a set of related Topics. Centres will develop an assignment, to be internally assessed, to engage students in work related to the Pearson-set Theme.

At Level 4, tutor will select a Topic to further define their approach to the Theme and assignment. At Level 5, it is expected that students will define their own Topic, in negotiation with Tutors, based on the Pearson-set Theme.

For example, from the Higher Nationals in Business:

Theme: “Corporate Social Responsibility (CSR) and its importance for sustainability and competitive advantage”

Level 4 Topics:

- How to start up a socially responsible company
- The impact of CSR on a functional area (e.g. HR, Marketing, Finance) within an organisation to promote profitability and financial sustainability.
- Implementing CSR activities within organisations to meet sustainability objectives.

Centres can find relevant support in the Pearson-set Assignment Guidance for the units, and the theme and topic release documentation which will be provided for each level.
The aim of the Pearson-set assignments is to provide a common framework for centres to develop work that will allow cross-sector benchmarking, through the standardisation of student work, and identification and sharing of ‘best practice’ in higher education teaching and learning. Pearson will share the ‘best practice’ results with all centres. For further information about Pearson-set Assignments and assessment, see section 6.0 Assessment of this document.

4.4 The unit descriptor

The Unit Descriptor is how we define the individual units of study that make up a Higher National qualification. Students will study and complete the units included in the programme offered at your centre.

We have described each part of the unit, as below. You may refer to any of the Unit Descriptors in Section 10 of this programme specification.

<table>
<thead>
<tr>
<th>Unit Title</th>
<th>A broad statement of what the unit will cover.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Code</td>
<td>The Ofqual unit designation</td>
</tr>
<tr>
<td>Unit Type</td>
<td>There are three unit types: core (mandatory to all pathways); specialist (mandatory to specific pathways); and optional (available to most pathways)</td>
</tr>
<tr>
<td>Unit level</td>
<td>All Pearson BTEC Higher National units are at Level 4 or Level 5</td>
</tr>
<tr>
<td>Credit value</td>
<td>The credit value is related to total qualification time (TQT) and unit learning hours (ULH), and is easy to calculate. 1 credit is equal to 10 ULH, so 15 credits are equal to 150 ULH. To complete a Higher National Certificate or Diploma students are expected to achieve the appropriate number of credits</td>
</tr>
<tr>
<td>Introduction</td>
<td>Some general notes on the unit, setting the scene, stating the purpose, outlining the topics and skills gained on completion of the unit</td>
</tr>
<tr>
<td><strong>Learning Outcomes</strong></td>
<td>The Learning Outcomes are explicit statements that clearly express what students will be able to do after the completion of the unit. There are, typically, four Learning Outcomes for each unit.</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Essential Content</strong></td>
<td>This section covers the content that students can expect to study as they work towards achieving their Learning Outcomes.</td>
</tr>
<tr>
<td><strong>Learning Outcomes and Assessment Criteria</strong></td>
<td>Each unit sets out the ‘Pass’, ‘Merit’ and ‘Distinction’ criteria for that unit. When assignments are graded, a tutor will refer to this table, which connects the unit’s Learning Outcomes with the student’s work. This assignment may be graded at ‘Pass’, ‘Merit’ or ‘Distinction level, depending on the quality of the students work.</td>
</tr>
<tr>
<td><strong>Recommended Resources</strong></td>
<td>Lists the resources appropriate to support the study of this unit. This includes books, journals and online material to support learning. The programme tutor may suggest alternatives and additions, usually with a local application or relevance.</td>
</tr>
</tbody>
</table>
Web resources – referencing:

Some units have web resources as part of their recommended resources lists. Hyperlinking to these resources directly can be problematic as locations and addresses of resources can change over time. To combat this we have referenced web resources as follows:

[1] A link to the main page of the website
[2] The title of the site
[3] The name of the section or element of the website where the resource can be found
[4] The type of resource it is, which may be one of the following –
  o research
  o general reference
  o tutorials
  o training
  o e-books
  o report
  o wiki
  o article
  o datasets
  o development tool
  o discussion forum

Web

  [3] Policies (sport)
  Research

[1] www.youthsporttrust.org
  [2] Youth Sport Trust
  [3] How we work
  [4] Programmes
4.5 National Governing Body Certifications/Additional Certifications

Employers within the Sport & Exercise Science sector often require applicants and employees to have gained additional certifications, often through National Governing Body qualifications.

Many of these certifications are awarded on a sport by sport basis so, for example, one student may wish to achieve a coaching award in hockey whereas another may wish to achieve their award in rugby.

Centres are advised to offer their students the opportunity to gain additional certifications in conjunction with their BTEC Higher National qualification.

There are many awarding organisations working in this space and centres need to use their discretion in choosing which certifications are appropriate to their students and the facilities and resources available.

Details of certifications available within your subject area and region will be available from the relevant National Governing Body.
5 Teaching and learning

The aim of this section is to provide guidance to centres so that they can engage students in a dynamic, interactive and reflective learning experience. This experience should effectively prepare students to successfully engage in the assessments, which will measure depth, as well as breadth, of knowledge. Teaching should stimulate academic engagement, develop challenging yet constructive discourse and encourage students to reflect on their own performance in preparation for a professional career. Additionally, centres are encouraged to expose students to autonomous and independent learning, which will facilitate the development of their academic skills, experiences and techniques required as they progress from one level of study to the next.

Centres are encouraged to develop programmes that have a distinctive focus on entry into work, delivering a curriculum that embeds employability, has a strong commitment to ethics and diversity, and introduces students to contemporary as well as seminal research. All teaching and learning should reflect the expectations of employers and society, and be informed and guided by external benchmarks such as professional and statutory bodies. In so doing students completing a Higher National in Sport & Exercise Science will have the attributes, skills, principles and behaviours that will enable them to make a valuable contribution to local, national and international commerce.

The contributions students make to their own experiences, alongside the experience of their peers, is invaluable. Student engagement and the student voice should form a significant aspect of a student’s life. Centres are encouraged to gather student opinions on a range of teaching and learning matters, which would be used to inform and enhance future practice within a programme of study and within a centre.

5.1 Delivering quality and depth

A high quality teaching and learning experience should include qualified and experienced lecturers, an interactive and engaging curriculum, motivated and inspired students, and a support system that caters for the pastoral as well as academic interests of students.

In addition to delivering a quality learning experience, centres must also encourage students to have a deeper understanding of the subject where they are able to go beyond the fundamentals of explaining and describing. Students are expected to show they can analyse data and information, make sense of this and then reach evaluative judgements. At the higher levels of study there is an expectation that students will be able to apply a degree of criticality to their synthesis of knowledge. This criticality would come from exposure to appropriate and relevant theories, concepts and models.
One of the reasons for delivering a quality learning experience, which has depth as well as breadth, is the benchmarking of the qualification to the Framework for Higher Education Qualifications (FHEQ). It also meets requirements set by the Regulated Qualifications Framework (RQF). The first stage of a Higher National in Sport & Exercise Science is the Higher National Certificate (HNC), which is aligned with Level 4 of both frameworks; with the Higher National Diploma (HND) aligned with Level 5. This means that the HNC has the same level of demand and expectations as the first year of a degree programme, with the HND having the same level of demand and expectations as the second year of a degree programme.

Centres are expected to provide a broadly similar experience for students to that which they would have if they attended a similar programme at a university. This could mean:

- Providing access to library facilities which has, as a minimum, available copies (physically and/or electronically) of all required reading material
- Access to research papers and journals
- Utilising a virtual learning environment (VLE) to support teaching
- Working with local employers (see below) to present real-life case studies
- Creating schemes of work that embrace a range of teaching and learning techniques
- Listening to the student voice.

Irrespective of the type of programme on which a student is enrolled, it is highly advisable that students are inducted onto their Higher National programme. This induction should include an introduction to the course programme and academic study skills that will be essential in supporting their research and studies, and, therefore, enhance the learning experience.

An induction programme should consist of the following:

- Course programme overview
- Preparing for lessons
- Effective engagement in lectures and seminars
- Making the most out of their tutor
- Assignment requirements
- Referencing and plagiarism
- Centre policies
- Academic study skills.
Pearson offer Higher National Global Study Skills to all students – an online toolkit that supports the delivery, assessment and quality assurance of BTECs in centres. This is available on the HN Global website www.highernationals.com. HN Global provides a wealth of support to ensure that tutors and students have the best possible experience during their course. With HN Global, students can search, share, comment, rank and sort a vast range of learning resources via an online digital library and tutors can create and annotate reading lists for students.

5.1.1 Embedded skills
There are a number of skills which are so key to studying and working in the Sport & Exercise Science sector that they are embedded in a number of units as is appropriate. Examples of these skills are behaviour change, teamwork, use of media, personal and social development etc.

Sports psychology research has seen the increase in the concept of emotional intelligence. Emotional intelligence is the ability to identify, assess and manage the emotions of self, others, and groups. More and more emotional intelligence is being seen as a vital tool for those in the Sport & Exercise Science sector.

These embedded skills are covered in relevant units in the essential content of the units and, where appropriate, the assessment criteria.

5.2 Engaging with employers
Just as the student voice is important, so too is the employer’s. Employers play a significant role in the design and development of all regulated qualifications, including the Higher Nationals in Sport & Exercise Science. This input should extend into the learning experience, where engagement with employers will add value to students, particularly in transferring theory into practice.

Centres should consider a range of employer engagement activities. These could include:

- Field trips to local Sport & Exercise Science events
- Inviting members of the local Sport & Exercise Science community to present guest lectures
- Using employers to judge the quality of assessed presentations and/or products
- (for the more entrepreneurial) establishing a panel of experts to whom students can pitch an idea.
While detailed guidance on assessment has been provided in this specification (see Section 6), it is worth considering the involvement of employers when determining assessment strategies and the use of different assessment tools. This enables centres to design assessments that are more closely related to what students would be doing in the workplace. Employers are able to comment on relevance and content, as well as the challenge presented by an assessment. Notwithstanding this, ultimately it is the centre's responsibility to judge the extent to which any employer contributes to teaching and learning.

5.3 Engaging with students

Students are integral to teaching and learning. As such it is important that they are involved as much as possible with most aspects of the programme on to which they are enrolled. This input could include taking into account their views on how teaching and learning will take place, their role in helping to design a curriculum, or on the assessment strategy that will test their knowledge and understanding.

There are many ways in which to capture the student voice and student feedback, both formal and informal. Formal mechanisms include the nomination of student representatives to act as the collective student voice for each student cohort, student representation at course team meetings, and an elected Higher Education representative as part of the Student Union. Student forums should also take place periodically throughout the year with minutes and action plans updated and informing the overall annual course monitoring process. Unit specific feedback can also be collated by students completing unit feedback forms, end of year course evaluations, and scheduled performance review meetings with their tutor.

However, this should not be the only time when feedback from students is sought. Discourse with students should be constant, whereby teachers adopt a ‘reflection on action’ approach to adjust teaching, so that students are presented with an environment that is most supportive of their learning styles. Just as employers could have an input into assessment design, so too could students. This will support the development of assignments that are exciting and dynamic, and fully engage students in meaningful and informative assessment.

The biggest advantage of consulting students on their teaching, learning and assessment is securing their engagement in their own learning. Students are likely to feel empowered and develop a sense of ownership of all matters related to teaching, learning and assessment, not just their own experiences. Students could also view themselves as more accountable to their lecturers, ideally seeing themselves as partners in their own learning and not just part of a process.
5.4 Planning and structuring a programme

Learning should be challenging yet exciting; teaching should be motivating and inspirational. Consequently, both teaching and learning should form part of a programme structure that is active, flexible and progressive, and has an industry focus wherever possible.

It is important for a programme structure to be effectively planned, taking into account the nature of the student cohort, the primary mode of delivery (face-to-face or distance learning) and the level of study. It is also advisable to consider the student voice (whether that voice is heard through end of programme feedback, or through on-going dialogue) when planning how and when students will be exposed to a particular subject. One other vital source of information that centres would do well to embrace is the feedback from tutors who have been and/or will be delivering learning.

It is recommended that centres establish a programme planning forum where various stakeholders are represented. This forum could consider different perspectives of teaching and learning and how these are planned into an effective programme structure. Consideration could be given to, for example, the holistic and consistent use of Virtual Learning Environments (VLEs), a programme of field trips, a strategy for engaging with employers, and how and when to assess learning.

Consideration should be given to a number of factors when planning a programme structure. These include:

- The sequencing of units
- Whether to have condensed or expanded delivery
- Teaching and learning techniques.

5.4.1 Sequencing units

The level of demand embedded within a unit is benchmarked to recognised standards. This applies to all units within a level of study, and this means that all Level 4 units have similar demands, as do all Level 5 units. However, this does not mean that units can, or should, be delivered in any order. For example, in the Higher National Diploma in Sport & Exercise Science it is strongly advised that Level 4 units are delivered, and achieved, by students before progression to Level 5. However, students are able to progress to level 5 with a minimum of 90 credits at Level 4.

Within each level it is advisable to sequence units so that those providing fundamental knowledge and understanding are scheduled early in the programme. It may also be advisable to schedule the assessment of units requiring the practice and application of more advanced skills later in the programme.
5.4.2 Condensed, expanded or mixed delivery

The next consideration is whether to deliver a unit in a condensed format alongside other units, or to deliver units over an expanded period. The following tables provide examples of this, based on four units being delivered in one teaching block.

**Condensed version:**

<table>
<thead>
<tr>
<th>Weeks 1 to 6</th>
<th>Week 7</th>
<th>Weeks 8 to 13</th>
<th>Week 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Assessment</td>
<td>Unit 3</td>
<td>Assessment</td>
</tr>
<tr>
<td>Unit 2</td>
<td></td>
<td>Unit 4</td>
<td></td>
</tr>
</tbody>
</table>

**Expanded version:**

<table>
<thead>
<tr>
<th>Weeks 1 to 12</th>
<th>Weeks 13 and 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Assessment</td>
</tr>
<tr>
<td>Unit 2</td>
<td></td>
</tr>
<tr>
<td>Unit 3</td>
<td></td>
</tr>
<tr>
<td>Unit 4</td>
<td></td>
</tr>
</tbody>
</table>
Mixed version:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Week 9</th>
<th>Week 10</th>
<th>Week 11</th>
<th>Week 12</th>
<th>Week 13</th>
<th>Week 14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 1</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Unit 2</th>
<th>Assessment</th>
<th>Unit 3</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit 4</th>
</tr>
</thead>
</table>

The decision to deliver a condensed, expanded or mixed programme would depend on a number of factors, including availability of resources, the subjects to be taught and the requirements of students. Each version has advantages: the condensed version would provide an opportunity for students to gain early success and achievement. This will enhance their self-efficacy, the sense of one's belief in one's ability to succeed, and self-confidence, with tutors being able to identify and respond to less able students early in the teaching and learning cycle.

The advantages of the expanded version include providing a longer timescale for students to absorb new knowledge and therefore, potentially, improve success, and giving tutors an opportunity to coach and support less able students over a longer period of time.

The mixed version, with some units spanning over the entire period and others lasting for shorter periods, provides opportunities for learning in some units to support development in others. This format may be particularly suited to a combination of practical and theoretical units. In all cases, the choice of which type of unit sequence must consider student opportunities as well as staff and physical resources of the centre.

As there are pros and cons to both approaches, the use of a planning forum would help to ensure the most appropriate approach is taken. For example, centres could chose to deliver the first teaching block using the expanded version, with the subsequent teaching block being delivered through a condensed approach.

It should be noted that the above consideration would apply equally to programmes that are being delivered face-to-face or through distance learning.
### 5.4.3 Drawing on a wide range of delivery techniques

As part of planning the range of techniques that will be used to deliver the syllabus, centres should also consider an appropriate combination of techniques for the subject.

The table below lists some of the techniques that centres could introduce into a planned programme structure.

<table>
<thead>
<tr>
<th>Technique</th>
<th>Face-to-face</th>
<th>Distance learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures and seminars</td>
<td>These are the most common techniques used by tutors. They offer an opportunity to engage with a large number of students, where the focus is on sharing knowledge through the use of presentations.</td>
<td>Delivery would be through video conferencing and/or pre-recorded audio and/or visual material, available through an online platform. Synchronous discussion forums could also be used.</td>
</tr>
<tr>
<td>Workshops</td>
<td>These are used to build on knowledge shared via tutors and seminars. Teaching can be more in-depth where knowledge is applied, for example to case studies or real-life examples. Workshops could be student-led, where students present, for example, findings from independent study.</td>
<td>While more challenging to organise than for face-to-face delivery, workshops should not be dismissed. Smaller groups of three or four students could access a forum simultaneously and engage in the same type of activity as for face-to-face.</td>
</tr>
<tr>
<td>Tutorials</td>
<td>These present an opportunity for focused one-to-one support, where teaching is led by an individual student’s requirements. These can be most effective in the run up to assessment, where tutors can provide more focused direction, perhaps based on a formative assessment.</td>
<td>Other than not necessarily being in the same room as a student, tutors could still provide effective tutorials. Video conferencing tools provide the means to see a student, which makes any conversation more personal.</td>
</tr>
<tr>
<td>Virtual Learning Environments (VLEs)</td>
<td>These are invaluable to students studying on a face-to-face programme. Used effectively, VLEs not only provide a repository for taught material such as presentation slides or handouts, but could be used to set formative tasks such as quizzes. Further reading could also be located on a VLE, along with a copy of the programme documents, such as the handbook and assessment timetable.</td>
<td>A VLE is a must if students are engaged with online delivery through distance or blended learning, as this would be the primary or the key source of learning. Where distance learning is primarily delivered through hard copies of workbooks, etc., the same principle would apply as for face-to-face learning.</td>
</tr>
<tr>
<td>Technique</td>
<td>Face-to-face</td>
<td>Distance learning</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Blended learning</td>
<td>The combination of traditional face-to-face learning and online learning. This can enable the students to gain personalised support, instruction and guidance while completing assigned activities and tasks remotely.</td>
<td>Offline learning enables students to develop autonomy and self-discipline by completing set activities and tasks with limited direction and traditional classroom-based constraints.</td>
</tr>
<tr>
<td>Work-based learning</td>
<td>Any opportunity to integrate work-based learning into a curriculum should be taken. This adds realism and provides students with an opportunity to link theory to practice in a way in which case studies do not. Many full-time students are involved in some form of employment, either paid or voluntary, which could be used, where appropriate, as part of their learning, for example when assignments require students to contextualise a response to a real organisation.</td>
<td>It is likely that the majority of distance learning students would be employed and possibly classed as mature students. Bringing theory to life through a curriculum, which requires work-based application of knowledge, would make learning for these students more relevant and meaningful. Perhaps more importantly, assessment should be grounded in a student's place of work, wherever possible.</td>
</tr>
<tr>
<td>Guest speakers</td>
<td>These could be experts from industry or visiting academics in the subject area that is being studied. They could be used to present a lecture/seminar, a workshop or to contribute to assessment. The objective is to make the most effective use of an expert's knowledge and skill by adding value to the teaching and learning experience.</td>
<td>As long as the expert has access to the same platform as the students then the value-added contribution would still be very high. Consideration would need to be given to timings and logistics, but with some innovative management this technique would still have a place in distance learning programmes.</td>
</tr>
<tr>
<td>Field trips</td>
<td>Effectively planned field trips, which have a direct relevance to the syllabus, would add value to the learning experience. Through these trips students could relate theory to practice, have an opportunity to experience organisations in action, and potentially open their minds to career routes.</td>
<td>The use of field trips could be included as part of a distance learning programme. They will add the same value and require the same planning. One additional benefit of field trips for distance learning is that they provide an opportunity for all students in a cohort to meet, which is a rare occurrence for distance learning students.</td>
</tr>
</tbody>
</table>
5.4.4 Assessment considerations

Centres should design assessment for learning. This is where an assessment strategy requires students to engage with a variety of assessment tools that are accessible, appropriately challenging, and support the development of student self-efficacy and self-confidence. To ensure that assignments are valid and reliable, centres must implement robust quality assurance measures and monitor the effectiveness of their implementation (see section 6 of this Programme Specification). This includes ensuring that all students engage in assessment positively and honestly.

Assessment also provides a learning opportunity for all stakeholders of the assessment to have access to feedback that is both individual to each student and holistic to the cohort. Feedback to students should be supportive and constructive. Student self-efficacy (and therefore self-confidence) can be significantly enhanced where feedback not only focuses on areas for improvement but recognises the strengths a student has. At the cohort level, similar trends could be identified that inform future approaches to assessments and teaching. Assessment is an integral part of the overall learning process and assessment strategy must be developed to support effective, reflective, thinking Sport & Exercise Science practitioners for the future. Assessment can be either formative, summative or both.

5.4.5 Formative assessment

Formative assessment is primarily developmental in nature and designed to give feedback to students on their performance and progress. Assessment designed formatively should develop and consolidate knowledge, understanding, skills and competencies. It is a key part of the learning process and can enhance learning and contribute to raising standards.

Through formative assessment tutors can identify students’ differing learning needs early on in the programme and so make timely corrective interventions. Tutors can also reflect on the results of formative assessment to measure how effective the planned teaching and learning is at delivering the syllabus. Each student should receive one set of written formative feedback, otherwise some students may feel that others are being given more than their share of verbal feedback.

5.4.6 Summative assessment

Summative assessment is where students are provided with the assignment grades contributing towards the overall unit grade. For summative assessment to be effective it should also give students additional formative feedback to support on-going development and improvement in subsequent assignments. All formative assessment feeds directly into the summative assessment for each unit and lays the foundations from which students develop the necessary knowledge and skills required for the summative assessment.
5.4.7 Assessment feedback

Effective assessment feedback is part of continuous guided learning which promotes learning and enables improvement. It also allows students to reflect on their performance and helps them understand how to make effective use of feedback. Constructive and useful feedback should enable students to understand the strengths and limitations of their performance, providing positive comments where possible as well as explicit comments on how improvements can be made. Feedback should reflect the learning outcomes and assessment criteria to also help students understand how these inform the process of judging the overall grade.

The timing of the provision of feedback and of the returned assessed work also contributes to making feedback effective. Specific turnaround time for feedback should be agreed and communicated with both tutors and students. Timing should allow students the opportunity to reflect on the feedback and consider how to make use of it in forthcoming assessments, taking into account the tutor's workload and ability to provide effective feedback.

5.4.8 Designing valid and reliable assessments

To help ensure valid and reliable assignments are designed and are consistent across all units, centres could consider a number of actions.

Use of language

The first aspect of an assignment that a centre could focus on is ensuring that language makes tasks/questions more accessible to students.

Due consideration must be given to the command verbs (i.e. the verbs used in unit assessment criteria) when considering the Learning Outcomes of a unit. Assignments must use appropriate command verbs that equate to the demand of the Learning Outcome. If the outcome requires 'analysis' then 'evaluative' requirements within the assignment must not be set when testing that outcome. This would be viewed as over-assessing. Similarly, it is possible to under-assess where analytical demands are tested using, for example, explanatory command verbs.

The following can be used as a guide to support assignment design:

- Ensure there is a holistic understanding (by tutors and students) and use of command verbs.
- Set assignment briefs that use a single command verb, focusing on the highest level of demand expected for the Learning Outcome(s) that is (are) being tested.
- Assignments should be supported by additional guidance that helps students to interpret the demand of the assessment criteria.
- Time-constrained assessments should utilise the full range of command verbs (or acceptable equivalents) appropriate to the academic level. Modes of time-constrained assessments include in-class tests and examinations that could be both open- or closed-book. Centres should pay close consideration to ensuring tests and exams are not replicated during the course of the year.

**Consistency**

This relates to the consistency of presentation and structure, the consistent use of appropriate assessment language, and the consistent application of grading criteria. Where assignments are consistent, reliability is enhanced. Where validity is present in assignments this will result in assignments that are fit for purpose and provide a fair and equitable opportunity for all students to engage with the assignment requirements.

**Employing a range of assessment tools**

Just as variation in teaching methods used is important to the planning of a programme structure, so too is the use of a range of assessment tools appropriate to the unit and its content. Centres should consider taking a holistic view of assessment, ensuring a balanced assessment approach with consideration given to the subject being tested and what is in the best interests of students. As mentioned above, consultation with employers could add a sense of realism to an assessment strategy. (A comprehensive list of assessment tools is provided in section 6.2 *Setting effective assignments*).

No matter what tool is used, assignments should have a sector focus (whether this is in a workplace context or through a case study), and be explicitly clear in its instructions. In the absence of a case study a scenario should be used to provide some context. Finally, students should be clear on the purpose of the assignment and which elements of the unit it is targeting.
6 Assessment

BTEC Higher Nationals in Sport & Exercise Science are assessed using a combination of internally assessed centre-devised internal assignments (which are set and marked by centres) and internally assessed Pearson-set assignments (which are set by Pearson and marked by centres). Pearson-set assignments are mandatory and target particular industry-specific skills. The number and value of these units are dependent on qualification size:

- For the HNC, one core, 15 credit, unit at Level 4 will be assessed by a mandatory Pearson-set assignment targeted at particular skills;
- For the HND, two core units: one core, 15 credit, unit at Level 4 and one core, 30 credit, unit at Level 5, will be assessed by a mandatory Pearson-set assignment targeted at particular skills;
- all other units are assessed by centre-devised internal assignments.

The purpose and rationale of having Pearson-set units on Higher Nationals is as follows:

**Standardisation of student work** – Assessing the quality of student work, that it is meeting the level and the requirements of the unit across all centres, that grade decisions and assessor feedback are justified, and that internal verification and moderation processes are picking up any discrepancies and issues.

**Sharing of good practice** – We will share good practice in relation to themes such as innovative approaches to delivery, the use of digital literacy, enhancement of student employability skills and employer engagement. These themes will align to those for QAA Higher Education Reviews.

An appointed External Examiner (EE) for the centre will ask to sample the Pearson-set assignment briefs in advance of the external examination visit. Although this is not a mandatory requirement for centres, we strongly advise that centres seek guidance and support from their EE on the Pearson-set assignments. The EE may also include the Pearson-set units in their sample of student work during their centre visit.

We have taken great care to ensure that the assessment method chosen is appropriate to the content of the unit and in line with requirements from professional bodies, employers and higher education.

In developing an overall plan for delivery and assessment for the programme, you will need to consider the order in which you deliver units, whether delivery will take place over short or long periods of time, and when assessment can take place.
6.0.1 Example Assessment Briefs

Each unit has supporting Example Assessment Briefs that are available to download from the course materials section on our website (http://qualifications.pearson.com/). The Example Assessment Briefs are there to give you an example of what the assessment will look like in terms of the feel and level of demand of the assessment. The Example Assessment Briefs, with the exception of the mandatory Pearson-set unit, provide tutors with suggested types of assignment and structure that can be adopted and, if so, must be adapted accordingly.

6.1 Principles of internal assessment

This section gives an overview of the key features of internal assessment and how you, as an approved centre, can offer it effectively. The full requirements and operational information are given in the Pearson Quality Assurance Handbook available in the support section of our website (http://qualifications.pearson.com/). All the assessment team will need to refer to this document.

For BTEC Higher Nationals it is important that you can meet the expectations of stakeholders and the needs of students by providing a programme that is practical and applied. Centres can tailor programmes to meet local needs and should use links with local employers and the wider business sector.

When internal assessment is operated effectively it is challenging, engaging, practical and up to date. It must also be fair to all students and meet national standards.

6.1.1 Assessment through assignments

For internally assessed units the format of assessment is an assignment taken after the content of the unit, or part of the unit if several assignments are used, has been fully delivered. An assignment may take a variety of forms, including practical and written types. An assignment is a distinct activity completed independently by students (either alone or in a team). An assignment is separate from teaching, practice, exploration and other activities that students complete with direction from and, formative assessment by, tutors.

An assignment is issued to students as an assignment brief with a hand-out date, a completion date and clear requirements for the evidence that students are expected to provide. There may be specific observed practical components during the assignment period. Assignments can be divided into separate parts and may require several forms of evidence. A valid assignment will enable a clear and formal assessment outcome based on the assessment criteria.
6.1.2 Assessment decisions through applying unit-based criteria

Assessment decisions for BTEC Higher Nationals are based on the specific criteria given in each unit and set at each grade level. The criteria for each unit have been defined according to a framework to ensure that standards are consistent in the qualification and across the suite as a whole. The way in which individual units are written provides a balance of assessment of understanding, practical skills and vocational attributes appropriate to the purpose of the qualifications.

The assessment criteria for a unit are hierarchical and holistic. For example, if an M criterion requires the student to show ‘analysis’ and the related P criterion requires the student to ‘explain’, then to satisfy the M criterion a student will need to cover both ‘explain’ and ‘analyse’. The unit assessment grid shows the relationships among the criteria so that assessors can apply all the criteria to the student’s evidence at the same time. In Appendix 3 we have set out a definition of terms that assessors need to understand.

Assessors must show how they have reached their decisions using the criteria in the assessment records. When a student has completed all the assessment for a unit then the assessment team will give a grade for the unit. This is given simply according to the highest level for which the student is judged to have met all the criteria. Therefore:

- **To achieve a Pass**, a student must have satisfied all the Pass criteria for the learning outcomes, showing coverage of the unit content and therefore attainment at Level 4 or 5 of the national framework.

- **To achieve a Merit**, a student must have satisfied all the Merit criteria (and therefore the Pass criteria) through high performance in each learning outcome.

- **To achieve a Distinction**, a student must have satisfied all the Distinction criteria (and therefore the Pass and Merit criteria), and these define outstanding performance across the unit as a whole.

The award of a Pass is a defined level of performance and cannot be given solely on the basis of a student completing assignments. Students who do not satisfy the Pass criteria should be reported as Unclassified.

6.1.3 The assessment team

It is important that there is an effective team for internal assessment. There are three key roles involved in implementing assessment processes in your centre, each with different interrelated responsibilities, and these roles are listed below. Full information is given in the Pearson Quality Assurance Handbook available in the support section of our website (http://qualifications.pearson.com/).
● The Programme Leader has overall responsibility for the programme, its assessment and internal verification to meet our requirements, record keeping and liaison with the EE. The Programme Leader registers with Pearson annually and acts as an assessor, supports the rest of the assessment team, makes sure they have the information they need about our assessment requirements, and organises training, making use of our guidance and support materials.

● Internal Verifiers (IVs) oversee all assessment activity in consultation with the Programme Leader. They check that assignments and assessment decisions are valid and that they meet our requirements. IVs will be standardised by working with the Programme Leader. Normally, IVs are also assessors, but they do not verify their own assessments.

● Assessors set or use assignments to assess students to national standards. Before taking any assessment decisions, assessors participate in standardisation activities led by the Programme Leader. They work with the Programme Leader and IVs to ensure that the assessment is planned and carried out in line with our requirements.

● Your EE will sample student work across assessors. Your EE will also want to see evidence of internal verification of assignments and assessment decisions.

6.1.4 Effective organisation

Internal assessment needs to be well organised so that student progress can be tracked and so that we can monitor that assessment is being carried out in line with national standards. We support you in this through, for example, providing training materials and sample documentation. Our online HN Global service can also help support you in planning and record keeping.

It is particularly important that you manage the overall assignment programme and deadlines to make sure that all your students are able to complete assignments on time.

6.1.5 Student preparation

To ensure that you provide effective assessment for your students, you need to make sure that they understand their responsibilities for assessment and the centre’s arrangements. From induction onwards you will want to ensure that students are motivated to work consistently and independently to achieve the requirements of the qualifications. They need to understand how assignments are used, the importance of meeting assignment deadlines, and that all the work submitted for assessment must be their own.
You will need to give your students a guide that explains:

- How assignments are used for assessment
- How assignments relate to the teaching programme
- How students should use and reference source materials, including what would constitute plagiarism.

The guide should also set out your centre’s approach to operating assessments, such as how students must submit assignments/work and the consequences of submitting late work and the procedure for requesting extensions for mitigating circumstances.

6.2 Setting effective assessments

6.2.1 Setting the number and structure of assignments

In setting your assessments you need to work with the structure of assessments shown in the relevant section of a unit. This shows the learning aims and outcomes and the criteria that you are expected to follow.

Pearson provide online Example Assessment Briefs for each unit to support you in developing and designing your own assessments.

In designing your own assignment briefs you should bear in mind the following points:

- The number of assignments for a unit must not exceed the number of Learning Outcomes listed in the unit descriptor. However, you may choose to combine assignments, either to cover a number of Learning Outcomes or to create a single assignment for the entire unit.

- You may also choose to combine all or parts of different units into single assignments, provided that all units and all their associated Learning Outcomes are fully addressed in the programme overall. If you choose to take this approach you need to make sure that students are fully prepared, so that they can provide all the required evidence for assessment, and that you are able to track achievement in assessment records.

- A Learning Outcome must always be assessed as a whole and must not be split into two or more elements.

- The assignment must be targeted to the Learning Outcomes but the Learning Outcomes and their associated criteria are not tasks in themselves. Criteria are expressed in terms of the outcome shown in the evidence.

You do not have to follow the order of the Learning Outcomes of a unit in setting assignments, but later Learning Outcomes often require students to apply the content of earlier Learning Outcomes, and they may require students to draw their learning together.
Assignments must be structured to allow students to demonstrate the full range of achievement at all grade levels. Students need to be treated fairly by being given the opportunity to achieve a higher grade, if they have the ability.

As assignments provide a final assessment, they will draw on the specified range of teaching content for the Learning Outcomes. The specified unit content must be taught/delivered. The evidence for assessment need not cover every aspect of the teaching content, as students will normally be given particular examples, case studies or contexts in their assignments. For example, if a student is carrying out one practical performance, or an investigation of one organisation, then they will address all the relevant range of content that applies in that instance.

6.2.2 Providing an assignment brief
A good assignment brief is one that, through providing challenging and authentic sector/work-related tasks, motivates students to provide appropriate evidence of what they have learnt.

An assignment brief should have:

- A vocational scenario: this could be a simple situation or a full, detailed set of vocational requirements that motivates the student to apply their learning through the assignment.
- Clear instructions to the student about what they are required to do, normally set out through a series of tasks.
- An audience or purpose for which the evidence is being provided.
- An explanation of how the assignment relates to the unit(s) being assessed.

6.2.3 Forms of evidence
BTEC Higher Nationals have always allowed for a variety of forms of assessment evidence to be used, provided they are suited to the type of Learning Outcomes being assessed. For many units, the practical demonstration of skills is necessary and, for others, students will need to carry out their own research and analysis, working independently or as part of a team.

The Example Assessment Briefs give you information on what would be suitable forms of evidence to give students the opportunity to apply a range of employability or transferable skills. Centres may choose to use different suitable forms of evidence to those proposed. Overall, students should be assessed using varied forms of evidence.
These are some of the main types of assessment:

- Written reports, essays
- In-class tests
- Examinations
- Creation of financial documents
- Creation of planning documents
- Work-based projects
- Academic posters, displays, leaflets
- PowerPoint (or similar) presentations
- Recordings of interviews/role plays
- Working logbooks, reflective journals
- Presentations with assessor questioning
- Time-constrained assessment.

(Full definitions of different types of assessment are given in Appendix 4.)

The form(s) of evidence selected must:

- Allow the student to provide all the evidence required for the Learning Outcomes and the associated assessment criteria at all grade levels.
- Allow the student to produce evidence that is their own independent work.
- Allow a verifier to independently reassess the student to check the assessor’s decisions.

For example, when you are using performance evidence, you need to think about how supporting evidence can be captured through recordings, photographs or task sheets.

Centres need to take particular care that students are enabled to produce independent work. For example, if students are asked to use real examples, then best practice would be to encourage them to use examples of their own or to give the group a number of examples that can be used in varied combinations.
6.3 Making valid assessment decisions

6.3.1 Authenticity of student work

An assessor must assess only student work that is authentic, i.e. the student’s own independent work. Students must authenticate the evidence that they provide for assessment through signing a declaration stating that it is their own work. A student declaration must state that:

- Evidence submitted for the assignment is the student’s own
- The student understands that false declaration is a form of malpractice.

Assessors must ensure that evidence is authentic to a student through setting valid assignments and supervising them during the assessment period. Assessors must also take care not to provide direct input, instructions or specific feedback that may compromise authenticity.

Centres may use Pearson templates or their own templates to document authentication.

During assessment an assessor may suspect that some or all of the evidence from a student is not authentic. The assessor must then take appropriate action using the centre's policies for malpractice. (See section 3.7 in this Programme Specification for further information.)

6.3.2 Making assessment decisions using criteria

Assessors make judgements using the criteria. The evidence from a student can be judged using all the relevant criteria at the same time. The assessor needs to make a judgement against each criterion that evidence is present and sufficiently comprehensive. For example, the inclusion of a concluding section may be insufficient to satisfy a criterion requiring ‘evaluation’.

Assessors should use the following information and support in reaching assessment decisions:

- The explanation of key terms in Appendix 3 of this document
- Examples of verified assessed work
- Your Programme Leader and assessment team's collective experience.
6.3.3 Dealing with late completion of assignments

Students must have a clear understanding of the centre’s policy on completing assignments by the deadlines that you give them. Students may be given authorised extensions for legitimate reasons, such as illness, at the time of submission, in line with your centre policies (see also Section 3.6 “Administrative arrangements for internal assessment”).

For assessment to be fair, it is important that students are all assessed in the same way and that some students are not advantaged by having additional time or the opportunity to learn from others. Centres should develop and publish their own regulations on late submission; and, this should make clear the relationship between late submission and the centre’s mitigating circumstances policy.

Centres may apply a penalty to assignments that are submitted beyond the published deadline. However, if a late submission is accepted, then the assignment should be assessed normally, when it is submitted, using the relevant assessment criteria; with any penalty or cap applied after the assessment. Where the result of assessment may be capped, due to late submission of the assignment, the student should be given an indication of their uncapped grade; in order to recognise the learning that has been achieved, and assessment feedback should be provided in relation to the uncapped achievement.

As with all assessment results, both the uncapped and capped grades should be recorded and ratified by an appropriate assessment board; taking into account any mitigating circumstances that may have been submitted.

6.3.4 Issuing assessment decisions and feedback

Once the assessment team has completed the assessment process for an assignment, the outcome is a formal assessment decision. This is recorded formally and reported to students. The information given to the student:

- Must show the formal decision and how it has been reached, indicating how or where criteria have been met.
- May show why attainment against criteria has not been demonstrated.
- Must not provide feedback on how to improve evidence but how to improve in the future.
6.3.5 Resubmission opportunity
An assignment provides the final assessment for the relevant Learning Outcomes and is normally a final assessment decision. A student who, for the first assessment opportunity, has failed to achieve a Pass for that unit specification shall be expected to undertake a reassessment.

- Only one opportunity for reassessment of the unit will be permitted.
- Reassessment for course work, project- or portfolio-based assessments shall normally involve the reworking of the original task.
- For examinations, reassessment shall involve completion of a new task.
- A student who undertakes a reassessment will have their grade capped at a Pass for that unit.
- A student will not be entitled to be reassessed in any component of assessment for which a Pass grade or higher has already been awarded.

6.3.6 Repeat Units
A student who, for the first assessment opportunity and resubmission opportunity, still failed to achieve a Pass for that unit specification can:

- At Centre discretion and Assessment Board, decisions can be made to permit a repeat of a unit.
- The student must study the unit again with full attendance and payment of the unit fee.
- The overall unit grade for a successfully completed repeat unit is capped at a Pass for that unit.
- Units can only be repeated once.

6.3.7 Assessment Boards
Each centre is expected by Pearson to hold Assessment Boards for all of its BTEC Higher National programmes. The main purpose of an Assessment Board is to make recommendations on:

- The grades achieved by students on the individual units
- Extenuating circumstances
- Cases of cheating and plagiarism
- Progression of students on to the next stage of the programme
● The awards to be made to students
● Referrals and deferrals.

Assessment Boards may also monitor academic standards. The main boards are normally held at the end of the session, although if your centre operates on a semester system there may be (intermediate) boards at the end of the first semester. There may also be separate boards to deal with referrals.

Where a centre does not currently have such a process then the EE should discuss this with the Quality Nominee and Programme Leader, stressing the requirement for Assessment Boards by both Pearson and QAA and that Assessment Board reports and minutes provide valuable evidence for QAA’s Review of Higher Education process.

6.4 Planning and record keeping

For internal processes to be effective, an assessment team needs to be well organised and keep effective records. The centre will also work closely with us so that we can quality assure that national standards are being satisfied. This process gives stakeholders confidence in the assessment approach.

The Programme Leader should have an assessment plan. When producing a plan the assessment team will wish to consider:

● The time required for training and standardisation of the assessment team.
● The time available to undertake teaching and carrying out of assessment, taking account of when students may complete external assessments and when quality assurance will take place.
● The completion dates for different assignments.
● Who is acting as IV for each assignment and the date by which the assignment needs to be verified.
● Setting an approach to sampling assessor decisions though internal verification that covers all assignments, assessors and a range of students.
● How to manage the assessment and verification of students’ work, so that they can be given formal decisions promptly.
● How resubmission opportunities can be scheduled.
The Programme Leader will also maintain records of assessment undertaken. The key records are:

- Verification of assignment briefs
- Student authentication declarations
- Assessor decisions on assignments, with feedback given to students
- Verification of assessment decisions.

Examples of records and further information are available in the Pearson Quality Assurance Handbook available in the support section of our website (http://qualifications.pearson.com).

6.5 Calculation of the final qualification grade

6.5.1 Conditions for the award

Conditions for the award of the HND
To achieve a Pearson BTEC Level 5 Higher National Diploma qualification a student must have:

- completed units equivalent to 120 credits at level 5
- achieved at least a pass in 105 credits at level 5
- completed units equivalent to 120 credits at level 4
- achieved at least a pass in 105 credits at level 4.

Conditions for the award of the HNC
To achieve a Pearson BTEC Level 4 Higher National Certificate qualification a student must have:

- completed units equivalent to 120 credits at level 4
- achieved at least a pass in 105 credits at level 4.

6.5.2 Compensation provisions

Compensation provisions for the HND
Students can still be awarded an HND if they have attempted but not achieved a Pass in one of the 15-credit units completed at level 4, and similarly if they have attempted but not achieved a Pass in one of the 15-credit units at level 5. However, they must complete and pass the remaining units for an HNC or HND as per the unit rules of combination of the required qualification.
Compensation provisions for the HNC

Students can still be awarded an HNC if they have not achieved a Pass in one of the 15-credit units completed, but have completed and passed the remaining units.

6.5.3 Calculation of the overall qualification grade

The calculation of the overall qualification grade is based on the student’s performance in all units. Students are awarded a Pass, Merit or Distinction qualification grade, using the points gained through all 120 credits, at Level 4 for the HNC or Level 5 for the HND, based on unit achievement. The overall qualification grade is calculated in the same way for the HNC and for the HND.

All units in valid combination must have been attempted for each qualification. The conditions of award and the compensation provisions will apply as outlined above. All 120 credits count in calculating the grade (at each level, as applicable).

The overall qualification grade for the HND will be calculated based on student performance in Level 5 units only.

Units that have been attempted but not achieved, and subsequently granted compensation, will appear as ‘Unclassified’, i.e. a ‘U’ grade, on the student’s Notification of Performance, that is issued with the student certificate.

Points per credit

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>4</td>
</tr>
<tr>
<td>Merit</td>
<td>6</td>
</tr>
<tr>
<td>Distinction</td>
<td>8</td>
</tr>
</tbody>
</table>

Point boundaries

<table>
<thead>
<tr>
<th>Grade</th>
<th>Point boundaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>420–599</td>
</tr>
<tr>
<td>Merit</td>
<td>600–839</td>
</tr>
<tr>
<td>Distinction</td>
<td>840 +</td>
</tr>
</tbody>
</table>
### 6.5.4 Modelled student outcomes

#### Pearson BTEC Level 4 Higher National Certificate

<table>
<thead>
<tr>
<th>Core 1</th>
<th>Credits</th>
<th>Level</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core 2</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>P</td>
<td>60</td>
<td>P</td>
<td>60</td>
<td>P</td>
<td>60</td>
<td>D</td>
<td>120</td>
<td>D</td>
</tr>
<tr>
<td>Core 3</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>P</td>
<td>60</td>
<td>P</td>
<td>60</td>
<td>P</td>
<td>60</td>
<td>D</td>
<td>120</td>
<td>M</td>
</tr>
<tr>
<td>Core 4</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>P</td>
<td>60</td>
<td>P</td>
<td>60</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>M</td>
</tr>
<tr>
<td>Core 5</td>
<td>15</td>
<td>4</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>M</td>
</tr>
<tr>
<td>Opt 1</td>
<td>15</td>
<td>4</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>M</td>
<td>90</td>
<td>D</td>
<td>120</td>
<td>D</td>
</tr>
<tr>
<td>Opt 2</td>
<td>15</td>
<td>4</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>D</td>
<td>120</td>
<td>D</td>
<td>120</td>
<td>D</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRADE</td>
<td>M</td>
<td>P</td>
<td>M</td>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Opt = Optional

#### Pearson BTEC Level 5 Higher National Diploma

<table>
<thead>
<tr>
<th>Core 1</th>
<th>Credits</th>
<th>Level</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
<th>Grade</th>
<th>Unit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core 2</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>P</td>
</tr>
<tr>
<td>Core 3</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>M</td>
</tr>
<tr>
<td>Core 4</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>M</td>
</tr>
<tr>
<td>Core 5</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>P</td>
</tr>
<tr>
<td>Core 6</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>U</td>
</tr>
<tr>
<td>Opt 1</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>D</td>
</tr>
<tr>
<td>Opt 2</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>M</td>
<td>0</td>
<td>P</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>D</td>
<td>0</td>
<td>D</td>
</tr>
<tr>
<td>Core 7</td>
<td>30</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>120</td>
<td>D</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>Core 8</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>D</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>Opt 3</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>D</td>
<td>120</td>
<td>P</td>
<td>60</td>
<td>D</td>
</tr>
<tr>
<td>Opt 4</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>D</td>
<td>120</td>
<td>P</td>
<td>60</td>
<td>D</td>
</tr>
<tr>
<td>Opt 5</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>P</td>
</tr>
<tr>
<td>Opt 6</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>P</td>
</tr>
<tr>
<td>Opt 7</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>M</td>
<td>90</td>
<td>P</td>
<td>60</td>
<td>M</td>
<td>90</td>
<td>M</td>
<td>90</td>
<td>P</td>
</tr>
<tr>
<td>TOTAL</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRADE</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Opt = Optional
7 Quality assurance

Pearson’s quality assurance system for all Pearson BTEC Higher National programmes is benchmarked to Level 4 and Level 5 on the Quality Assurance Agency (QAA) Framework for Higher Education Qualifications (FHEQ). This will ensure that centres have effective quality assurance processes to review programme delivery. It will also ensure that the outcomes of assessment are to national standards.

The quality assurance process for centres offering Pearson BTEC Higher National programmes comprise five key components:

1 The approval process
2 Monitoring of internal centre systems
3 Independent assessment review
4 Annual programme monitoring report
5 Annual student survey

7.1 The approval process

Centres new to the delivery of Pearson programmes will be required to seek approval initially through the existing centre approval process and then through the programme approval process. Programme approval for new centres can be considered in one of two ways:

- Desk-based approval review
- Review and approval visit to the centre.

Prior to approval being given, centres will be required to submit evidence to demonstrate that they:

- Have the human and physical resources required for effective delivery and assessment.
- Understand the implications for independent assessment and agree to abide by these.
- Have a robust internal assessment system supported by ‘fit for purpose’ assessment documentation.
- Have a system to internally verify assessment decisions, to ensure standardised assessment decisions are made across all assessors and sites.
Applications for approval must be supported by the head of the centre (Principal or Chief Executive, etc.) and include a declaration that the centre will operate the programmes strictly, as approved and in line with Pearson requirements.

Centres seeking to renew their programme approval upon expiry of their current approval period may be eligible for the Automatic Approval process, subject to the centre meeting the eligibility criteria set out by Pearson.

Regardless of the type of centre, Pearson reserves the right to withdraw either qualification or centre approval when it deems there is an irreversible breakdown in the centre’s ability either to quality assure its programme delivery or its assessment standards.

### 7.2 Monitoring of internal centre systems

Centres will be required to demonstrate on-going fulfilment of the centre approval criteria over time and across all Higher National programmes. The process that assures this is external examination, which is undertaken by EE. Centres will be given the opportunity to present evidence of the on-going suitability and deployment of their systems to carry out the required functions. This includes the consistent application of policies affecting student registrations, appeals, effective internal examination and standardisation processes. Where appropriate, centres may present evidence of their operation within a recognised code of practice, such as that of the QAA for Higher Education. Pearson reserves the right to confirm independently that these arrangements are operating to Pearson’s standards.

Pearson will affirm, or not, the on-going effectiveness of such systems. Where system failures are identified, sanctions (appropriate to the nature of the problem) will be applied, in order to assist the centre in correcting the problem.

### 7.3 Independent assessment review

The internal assessment outcomes reached for all Pearson BTEC Higher National programmes benchmarked to Level 4 and Level 5 of the QAA’s FHEQ, are subject to a visit from a Pearson appointed EE. The outcomes of this process will be:

- To confirm that internal assessment is to national standards and allow certification, **or**
- To make recommendations to improve the quality of assessment outcomes before certification is released, **or**
- To make recommendations about the centre’s ability to continue to be approved for the Pearson BTEC Higher National qualifications in question.
7.4 Annual Programme Monitoring Report (APMR)

The APMR is a written annual review form that provides opportunity for centres to analyse and reflect on the most recent teaching year. By working in collaboration with centres, the information can be used by Pearson to further enhance the quality assurance of the Pearson BTEC Higher National programmes.

7.5 Annual student survey

Pearson will conduct an annual survey of Pearson BTEC Higher National students. The purpose of the survey is to enable Pearson to evaluate the student experience as part of the quality assurance process, by engaging with students studying on these programmes.

7.6 Centre and qualification approval

As part of the approval process, your centre must make sure that the resource requirements listed below are in place before offering the qualification.

Centres must have appropriate physical resources (for example equipment, IT, learning materials, teaching rooms) to support the delivery and assessment of the qualifications.

- Staff involved in the assessment process must have relevant expertise and/or occupational experience.
- There must be systems in place to ensure continuing professional development for staff delivering the qualification.
- Centres must have in place appropriate health and safety policies relating to the use of equipment by staff and students.
- Centres must deliver the qualification in accordance with current equality legislation.
- Centres should refer to the individual unit descriptors to check for any specific resources required.

The result, we believe, are qualifications that will meet the needs and expectations of students worldwide.
7.7 Continuing quality assurance and standards verification

We produce annually the latest version of the Pearson Quality Assurance Handbook available in the support section of our website (http://qualifications.pearson.com). It contains detailed guidance on the quality processes required to underpin robust assessment and internal verification.

The key principles of quality assurance are that:

- A centre delivering Pearson BTEC Higher National programmes must be an approved centre, and must have approval for the programmes or groups of programmes that it is delivering.

- The centre agrees, as part of gaining approval, to abide by specific terms and conditions around the effective delivery and quality assurance of assessment; it must abide by these conditions throughout the period of delivery.

- Pearson makes available to approved centres a range of materials and opportunities through the assessment checking service. This is intended to exemplify the processes required for effective assessment and provide examples of effective standards. Approved centres must use the materials and services to ensure that all staff delivering BTEC qualifications keep up to date with the guidance on assessment.

- An approved centre must follow agreed protocols for standardisation of assessors and verifiers, for the planning, monitoring and recording of assessment processes, and for dealing with special circumstances, appeals and malpractice.

The approach of quality-assured assessment is through a partnership between an approved centre and Pearson. We will make sure that each centre follows best practice and employs appropriate technology to support quality-assurance processes where practicable. We work to support centres and seek to make sure that our quality-assurance processes do not place undue bureaucratic processes on centres. We monitor and support centres in the effective operation of assessment and quality assurance.
The methods we use to do this for BTEC Higher Nationals include:

- Making sure that all centres complete appropriate declarations at the time of approval
- Undertaking approval visits to centres
- Making sure that centres have effective teams of assessors and verifiers who are trained to undertake assessment
- Assessment sampling and verification through requested samples of assessments, completed assessed student work and associated documentation
- An overarching review and assessment of a centre’s strategy for assessing and quality-assuring its BTEC programmes.

An approved centre must make certification claims only when authorised by us and strictly in accordance with requirements for reporting. Centres that do not fully address and maintain rigorous approaches to quality assurance cannot seek certification for individual programmes or for all BTEC Higher National qualifications. Centres that do not comply with remedial action plans may have their approval to deliver qualifications removed.
8 Recognition of Prior Learning and attainment

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether students can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess, and so do not need to develop through a course of learning.

Pearson encourages centres to recognise students’ previous achievements and experiences whether at work, home or at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning. RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be valid and reliable.

For full guidance on RPL please refer to the Recognition of Prior Learning policy document available in the support section of our website (https://qualifications.pearson.com).

QCF Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science mapped to the RQF Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science can be found in Appendix 7 in this programme specification.
9 Equality and diversity

Equality and fairness are central to our work. The design of these qualifications embeds consideration of equality and diversity as set out in the qualification regulators’ General Conditions of Recognition. Promoting equality and diversity involves treating everyone with equal dignity and worth, while also raising aspirations and supporting achievement for people with diverse requirements, entitlements and backgrounds. An inclusive environment for learning anticipates the varied requirements of students, and aims to ensure that all students have equal access to educational opportunities. Equality of opportunity involves enabling access for people who have differing individual requirements as well as eliminating arbitrary and unnecessary barriers to learning. In addition, students with and without disabilities are offered learning opportunities that are equally accessible to them, by means of inclusive qualification design.

Pearson’s equality policy requires all students to have equal opportunity to access our qualifications and assessments. It also requires our qualifications to be designed and awarded in a way that is fair to every student. We are committed to making sure that:

- Students with a protected characteristic (as defined in legislation) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to students who do not share that characteristic.
- All students achieve the recognition they deserve from undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

Pearson’s policy regarding access to its qualifications is that:

- They should be available to everyone who is capable of reaching the required standards
- They should be free from any barriers that restrict access and progression
- There should be equal opportunities for all those wishing to access the qualifications.
Centres are required to recruit students to Higher National qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about the qualifications, and that the qualification will meet their needs. Centres will need to review the entry profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to a higher level qualification. Centres should take appropriate steps to assess each applicant’s potential and make a professional judgement about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the student within the centre during their programme of study and any specific support that might be necessary to allow the student to access the assessment for the qualification. Centres should consult our policy documents on students with particular requirements.

**Access to qualifications for students with disabilities or specific needs**

Students taking a qualification may be assessed in a recognised regional sign language, where it is permitted for the purpose of reasonable adjustments. Further information on access arrangements can be found in the Joint Council for Qualifications (JCQ) document Access Arrangements, Reasonable Adjustments and Special Consideration for General and Vocational Qualifications. Details on how to make adjustments for students with protected characteristics are given in the document *Pearson Supplementary Guidance for Reasonable Adjustment and Special Consideration in Vocational Internally Assessed Units*. See the support section of our website for [both documents](http://qualifications.pearson.com/).
10 Higher Nationals in Sports & Exercise Science Units
Unit 1: Nutrition

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Y/616/0950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit type</td>
<td>Core</td>
</tr>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

The food we consume directly influences the functions of our body. Our bodies need adequate nutrition otherwise they begin to function abnormally. We can optimise our physical and psychological wellbeing by consuming a healthy balanced diet.

This unit aims to equip the student with the knowledge, skills and competencies to understand the nutritional composition of food and the effects of nutritional choices on the health of a person. Students will gain knowledge of the importance of eating a balanced diet and the dangers associated with the consumption of a poor diet. They will focus on diet prescription for specific populations and gain an understanding of labelling systems and the pitfalls that can be associated with them.

Students will research current therapeutic diets for specific groups with intolerances and diseases while also investigating fad diets. Students will learn about the components of the digestive system and how it functions and will become familiar with the academic language associated with nutrition. Within this unit students will engage in self-directed learning.
Learning Outcomes

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

1. Identify the main components of nutrition for optimal health and sports performance
2. Explain the main components of the digestive system and the factors that affect optimal function
3. Investigate the connection between food consumption and disease
4. Explore a range of specific diets, with particular focus on their dietary principles.
**Essential content**

**LO1** *Identify the main components of nutrition for optimal health and sports performance*

*Definition, structure, function and sources of micro and macro nutrients:*
Protein, fats, carbohydrates, vitamins and minerals
Food pyramid and food groups
Cholesterol
Deficiencies of micro and macro nutrients
Effects of dehydration
The importance of soluble and insoluble fibre in the diet
Super foods

*The nutritional needs of specific populations in society:*
Athletes, children, young people, adults, the elderly, and pregnant mothers
Sports – strength and endurance athletes

*Food labels:*
Labelling systems, e.g. the traffic light system
Nutritional information, e.g. ingredients and additives
Marketing tools, brand imaging, the effectiveness of food labels
Review the European Union (EU) labelling laws
Potential benefits of nutritional supplements in sports

**LO2** *Explain the main components of the digestive system and the factors that affect optimal function*

*Physiology of the digestive system and ancillary organs:*
Functions of the digestive system, e.g. mechanical and chemical digestion
Functions of the liver, pancreas, gall bladder and the kidneys
Five phases involved in the digestive process
Different processes involved in digestion and where they occur – ingestion of food, breakdown, digestion, absorption, and defecation
**Microbiome and microbiota:**
Microbiome in terms of its function and the microbiota that inhabit it
Role of microbes in sustaining a healthy gut, leaky gut
Microbiome and the pathophysiology of the body
Healthy diet in maintaining a healthy gut, consumption of prebiotics and probiotics

**LO3 Investigate the connection between food consumption and disease**

**Disordered physiological processes:**
Energy balance, input versus output, calculation, Harris Benedict equation
Poor dietary habits, e.g. atherosclerosis, hypo-dyslipidaemia, hypertension, joint problems obesity, Type 2 diabetes, coronary heart disease, inflammatory disorders, depression, anxiety and food intolerance

**Factors leading to these conditions:**
Dietary improvements to improve health

**Nutritional tests, medical tests:**
Heart angiogram, York test, foetal test, urine test, small intestine biopsy for microbes, cholesterol test and vitamin D blood test, among others

**LO4 Explore a range of specific diets, with particular focus on their dietary principles**

**Prescriptive diets:**
The athletic diet for strength and endurance, Coeliac diet, lactose intolerant diet, vegan diet, diabetic diet, vegetarian

**Dysfunctional diets:**
High fat diet, processed food diet, high sugar diet, high alcohol diet

**Fad diets:**
Atkins diet, celebrity, slim diet, 5/2 diet, probiotic diet, apple cider vinegar diet, Mediterranean diet, the ketone diet, food map diet
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Identify the main components of nutrition for optimal health and sports performance</td>
<td><strong>P1</strong> Outline the structure, function and sources of micro and macro nutrients and impact of deficiencies</td>
<td><strong>D1</strong> Analyse different food labels, discuss their nutritional benefits and shortcomings, pay particular attention to any additives that may be in the ingredients</td>
</tr>
<tr>
<td></td>
<td><strong>P2</strong> Discuss the specific nutritional requirements of specific populations, including an athlete</td>
<td><strong>M1</strong> Identify why labels are important for the consumer</td>
</tr>
<tr>
<td></td>
<td><strong>M2</strong> Demonstrate a knowledge of food labelling laws, including knowledge about additives, nutritional information and ingredients lists</td>
<td><strong>M2</strong> Demonstrate a knowledge of food labelling laws, including knowledge about additives, nutritional information and ingredients lists</td>
</tr>
<tr>
<td><strong>LO2</strong> Explain the main components of the digestive system and the factors that affect optimal function</td>
<td><strong>P3</strong> Explain the physiology of the digestive system and ancillary organs</td>
<td><strong>D2</strong> Analyse how the microbiome can affect the pathophysiology of the body</td>
</tr>
<tr>
<td></td>
<td><strong>P4</strong> Discuss the importance of a healthy diet in maintaining a healthy gut</td>
<td><strong>M3</strong> Discuss the functional properties of the microbiome</td>
</tr>
<tr>
<td></td>
<td><strong>D2</strong> Analyse how the microbiome can affect the pathophysiology of the body</td>
<td><strong>M3</strong> Discuss the functional properties of the microbiome</td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate the connection between food consumption and disease</td>
<td><strong>P5</strong> Discuss specific disordered physiological processes that can occur due to poor dietary habits</td>
<td><strong>D3</strong> Make nutritional recommendations that could be implemented to reverse or improve these conditions</td>
</tr>
<tr>
<td></td>
<td><strong>M4</strong> Identify the range of nutritional tests that are available to people suffering from nutrition-related conditions</td>
<td><strong>D3</strong> Make nutritional recommendations that could be implemented to reverse or improve these conditions</td>
</tr>
<tr>
<td><strong>LO4</strong> Explore a range of specific diets, with particular focus on their dietary principles</td>
<td><strong>P6</strong> Differentiate between fad diets, prescriptive diets and dysfunctional diets</td>
<td><strong>D4</strong> Evaluate the validity of these diets based on scientific research and medical statistics</td>
</tr>
<tr>
<td></td>
<td><strong>M5</strong> Discuss one of each diet category: fad diet, prescriptive diet, and dysfunctional diet</td>
<td><strong>D4</strong> Evaluate the validity of these diets based on scientific research and medical statistics</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
- www.food.gov.uk Research allergies intolerances
  General reference regulation legislation
  Food alerts discussion forum
- www.nutrition.org.uk Research
  General reference Nutrition science

Links
This unit links to the following related units:
*Unit 7: Physical Activity, Lifestyle & Health*
*Unit 3: Anatomy & Physiology*
*Unit 26: Exercise Physiology*
*Unit 27: Advanced Nutrition*
Unit 2: Fundamentals of Sport & Exercise Psychology

<table>
<thead>
<tr>
<th>Unit code</th>
<th>K/616/1682</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Type</td>
<td>Core</td>
</tr>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

It has been well recognised in recent times that Sport and Exercise Psychology contributes to the development of successful sports performance and exercise participation. Having a positive mental state is, therefore, not only a determinant but also an antecedent of sport and exercise participation and performance and can lead to the development of healthy exercise habits. Evaluating how psychological theories and principles can influence participation in sport and exercise contexts is, therefore, a key responsibility of sport science practitioners who work not only with elite athletes, but also with individuals who participate for recreational purposes.

The aims of this unit are to illustrate how psychological concepts underpin involvement in sport and exercise and to demonstrate their impact on human behaviour. Students will explore the innate characteristics which are seen as the basis for sport and exercise behaviour. Students will also develop an appreciation of how the social environment within which sport and exercise takes place influences the outcome of their participation.

As the unit considers aspects of human behaviour, some of the content and study time will be focused on reflection and analysis of individual behaviour as a performer, participant or practitioner. Topics included in this unit are: motivation, self-confidence and self-efficacy, group processes, group cohesion, leadership, models of exercise behaviour, exercise dependence and addiction, and the role of sport and exercise on the development of a positive psychological wellbeing.
On successful completion of this unit, students will be able to use psychological theories and principles to inform their own practice as a performer, participant or practitioner and review the impact they have on sport and exercise participation. Students will develop skills such as communication, application and reflection which are crucial for gaining entry into the sport and exercise industry.
Learning Outcomes

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

1. Identify appropriate theories and principles relevant to motivation and the impact they have on sport and exercise participation
2. Describe the effects of self-efficacy on sport and exercise participation and performance
3. Recognise the impact of group processes, cohesion and leadership on successful participation in sport and exercise
4. Analyse the impact of sport and exercise participation on psychological wellbeing.
Essential content

LO1 Identify appropriate theories and principles relevant to motivation and the impact they have on sport and exercise participation

Motivation:
Definition and types of motivation – intrinsic motivation, extrinsic motivation and achievement motivation
Benefits of motivation – improved performance and adherence, enhanced self-confidence, concentration and greater application of effort
Consequences of too much motivation – mistakes, over-arousal, burnout, and overtraining

Theories of motivation:
Views of motivation – trait-centred view, situational-centred view and interactional view
Self-determination Theory – the role of autonomy, competence and relatedness on the development of intrinsic motivation
Cognitive Evaluation Theory – differential effects of rewards on intrinsic motivation, functional significance of rewards
Attribution Theory – Weiner’s two-dimensional model, the impact of attributions on an individual's emotions and future expectations for future success and failure
Achievement Goal Theory – goal orientations (task and ego) Motivational Climate (master and performance)
Adaptive and maladaptive outcomes (cognitive, affective and behavioural).

LO2 Describe the effects of self-efficacy on sport and exercise participation and performance

Self-confidence:
Definition and types of self-confidence – state and trait
Benefits of self-confidence, e.g. enhanced motivation, positive mindset, improved concentration, improved performance and adherence to exercise
Bandura’s self-efficacy theory:
Definition of self-efficacy (situation-specific form of self-confidence)
Determinants of self-efficacy – performance accomplishments, vicarious experiences, verbal persuasion and emotional arousal
Consequences of self-efficacy – satisfaction and improved performance

LO3 Recognise the impact of group processes, cohesion and leadership on successful participation in sport and exercise

Group processes:
Different between a group and a team
Theories of group development – linear, cyclical and pendicular
Steiner’s model of group productivity – the link between actual productivity, potential productivity and process losses
Ringlemann effect and social loafing – definitions, reasons why people social loaf (e.g. lack of role clarity, low perceived ability, low self-confidence and motivation and lack of recognition)

Group cohesion:
Definition and types of cohesion – task and social
Factors that influence group cohesion – environmental, personal, leadership and team
Assessing group cohesion – group environment questionnaire (GEQ) and sociograms

Leadership:
Definition of leadership
Leadership styles – autocratic, democratic and laissez-faire
Approaches/models of leadership, e.g. trait, behavioural, interactional and Chellandurai’s multidimensional model
LO4 Analyse the impact of sport and exercise participation on psychological wellbeing

Exercise participation and adherence:
- Barriers to sport and exercise participation
- Reasons for taking part in sport and exercise
- Reasons for not taking part in sport and exercise

Exercise and psychological wellbeing:
- Role of sport and exercise in reducing anxiety and depression
- Exercise dependence and addiction
- Role of sport and exercise in promoting self-esteem and increasing emotional intelligence
- Impact of body image and social physique anxiety on sport and exercise participation

Models of exercise behaviour:
- Models: theory of planned behaviour, health belief model, transtheoretical model
- Strategies to enhance exercise adherence, e.g. decisional balance sheets, social support, prompts, contracting, use of rewards
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Identify appropriate theories and principles relevant to motivation and the impact they have on sport and exercise participation</td>
<td><strong>P1</strong> Explain theories of motivation in relation to sport and exercise participation and performance</td>
<td><strong>D1</strong> Evaluate the role of motivation in developing healthy sport and exercise habits, making reference to one theory of motivation</td>
</tr>
<tr>
<td><strong>P2</strong> Outline the benefits and consequences of motivation in relation to sport and exercise</td>
<td><strong>M1</strong> Apply a theory of motivation to your role as a performer, participant or sports science practitioner</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Describe the effects of self-efficacy on sport and exercise participation and performance</td>
<td><strong>P3</strong> Explain the benefits of self-confidence in relation to sport and exercise</td>
<td><strong>D2</strong> Analyse how the sources of efficacy information can lead to performance and satisfaction in sport and exercise</td>
</tr>
<tr>
<td><strong>P4</strong> Examine the key components of Bandura’s self-efficacy theory</td>
<td><strong>M2</strong> Apply Bandura’s self-efficacy theory to sport and exercise participation and performance</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Recognise the impact of group processes, cohesion and leadership on successful participation in sport and exercise</td>
<td><strong>P5</strong> Explain the role of leadership in the development of effective groups</td>
<td><strong>D3</strong> Analyse the role of group processes, group cohesion and leadership in participant success within sport and exercise settings</td>
</tr>
<tr>
<td><strong>P6</strong> Discuss the importance of cohesion in sport and exercise participation and performance</td>
<td><strong>M3</strong> Assess the impact of leadership on the development of effective and cohesive groups</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Analyse the impact of sport and exercise participation on psychological wellbeing</td>
<td><strong>P7</strong> Explain psychological factors that influence participation in sport and exercise</td>
<td><strong>D4</strong> Evaluate the role of sport and exercise in the promotion of a positive psychological wellbeing</td>
</tr>
<tr>
<td><strong>P8</strong> Discuss the barriers to sport and exercise participation</td>
<td><strong>M4</strong> Assess the use of models of exercise behaviour in the promotion of sport and exercise participation</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Journals

*Journal of Applied Sport Psychology*

*Journal of Sport and Exercise Psychology*

*Psychology of Sport and Exercise*

*The Sport Psychologist*

Links

This unit links to the following related units:

*Unit 5: Coaching Practice & Skill Development*

*Unit 7: Physical Activity Lifestyle and Health*

*Unit 20: Health Community Engagement*

*Unit 28: Leadership & Management*

*Unit 32: Psychology for Performance*.
Unit 3: Anatomy & Physiology

<table>
<thead>
<tr>
<th>Unit code</th>
<th>D/616/0951</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit type</td>
<td>Core</td>
</tr>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

**Introduction**

The study of the human body is vital in understanding how movement is produced, the systems at work and how they work together to create athletic movement. Anatomy studies the structure of the human body while physiology is concerned with understanding its function.

This unit is designed for students wanting to gain knowledge of the anatomy of the musculoskeletal system and understanding how movement is produced. Students interested in careers such as personal training, physical education teaching, occupational therapy, coaching, exercise prescription and performance analysis would find this a key unit in informing their practice.

This unit will explore the structure and function of the skeleton, osteology and the anatomy of bones and bone growth, types of joint, their structure and their contribution to range of movement. Students will examine the structure of the musculoskeletal system and begin to understand the complexities involved in effective performance.

This unit will explore the structure and function of the cardiovascular and respiratory systems and their role in exercise, the changes that take place and the effect of environmental factors on their effectiveness.
Learning Outcomes

By the end of this unit students will be able to:
1. Identify the key structures of the skeletal system
2. Describe the structure and function of muscles
3. Explore the structure and function of the cardiovascular system
4. Discuss the structure and function of the respiratory system.
Essential content

LO1 Identify the key structures of the skeletal system

Anatomical terminology:
Axial and appendicular skeleton
Positional and directional terminology (e.g. transverse, sagittal)
Major anatomical landmarks

Structure and function of the skeletal system:
Support, protection, movement, minerals, chemical energy storage
Identifying, naming and locating major bones
Knowing types of bone, differing functions of bones in relation to their structure, description of skeletal growth and changes in structure
The function and anatomy of long bones

Joint structure and function:
Structure of synovial joints, e.g. ligaments, cartilage, synovial fluid, etc. How their structures aid their specific functions
Cartilaginous and fibrous joints, location, structure and function

Movement terminology (e.g. flexion, extension, rotation, pronation and supination):
Range of movement dependent upon types of joint
Relate structure to function and lever systems

LO2 Describe the structure and function of muscles

Functions of muscles:
Posture, locomotion, generation of force
Voluntary and involuntary muscles, striated and non-striated

 Muscle types:
Skeletal muscle in relation to types, names, origins and insertions, functional anatomy and muscle surface anatomy
Cardiac muscle and smooth muscle
**Roles of skeletal muscle, e.g. agonists, antagonists etc.:**
The type of contraction (concentric, isometric and concentric) dictated by muscle role
Their types of contraction and the movement produced

**Structure of muscles:**
Tendons, ligaments, muscle belly and tendons to sarcomere and structural proteins, sliding filament theory, myocytes, myofibrils, actin and myosin and their role in force generation

**LO3** **Explore the structure and function of the cardiovascular system**

**Structure of heart and surrounding anatomy:**
The cardiovascular system – structure and function
Changes in structure and function with exercise – blood vessels, capillaries, veins, arteries, cardiac impulse, cardiac output, regulation of Heart rate (HR) at rest, regulation of Heart rate (HR) during exercise
SAN and AV node and heart regulation
Sympathetic and parasympathetic nervous system, bundle of His and Purkinje fibres
Adrenaline and noradrenaline

**LO4** **Discuss the structure and function of the respiratory system**

**The respiratory system:**
Structure and function, the anatomy of the lungs
Gaseous exchange – pulmonary ventilation, the process of breathing or the movement of gases into and out of the lungs
External respiration, the exchange of gases between the alveoli and pulmonary blood
Respiratory gas transport, transport of gases to and from the lungs and cells via the bloodstream, involving the cardiovascular system
Internal respiration, the exchange of gases between the blood and the cells at the capillary level
The effects of environmental factors, e.g. temperature, pressure and saturation on gas volumes, transportation of gases, gas exchange and the concept of partial pressures in response to exercise
# Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Identify the key structures of the skeletal system</td>
<td><strong>M1</strong> Suggest how the structure of synovial joints produces a range of movements</td>
<td><strong>D1</strong> Analyse the role and function of the musculoskeletal system in relation to sporting examples</td>
</tr>
<tr>
<td><strong>P1</strong> Show the structure of the skeletal system</td>
<td><strong>P2</strong> Identify the structure of common synovial joints</td>
<td><strong>LO1 &amp; LO2</strong></td>
</tr>
<tr>
<td><strong>LO2</strong> Describe the structure and function of muscles</td>
<td><strong>M2</strong> Evaluate the major muscles of the human body relating structure to function</td>
<td><strong>LO3 &amp; LO4</strong></td>
</tr>
<tr>
<td><strong>P3</strong> Identify the major muscles of the human body</td>
<td><strong>P4</strong> Illustrate how muscle contractions occur</td>
<td><strong>D2</strong> Analyse how the cardiovascular and respiratory systems work together in response to an identified sport or exercise example</td>
</tr>
<tr>
<td><strong>LO3</strong> Explore the structure and function of the cardiovascular system</td>
<td><strong>P5</strong> Demonstrate the structure of the cardiovascular system</td>
<td><strong>M3</strong> Discuss how the cardiovascular system responds to exercise</td>
</tr>
<tr>
<td><strong>P6</strong> Describe the function of the cardiovascular system</td>
<td><strong>M4</strong> Discuss how the respiratory system responds to exercise</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Discuss the structure and function of the respiratory system</td>
<td><strong>P7</strong> Demonstrate the structure of the respiratory system</td>
<td><strong>P8</strong> Describe the function of the respiratory system</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.bases.org.uk British Association of Sport and Exercise Science
Physiology General reference

Links
This unit links to the following related units:

*Unit 7: Physical Activity, Lifestyle and Health*
*Unit 9: Biomechanics*
*Unit 26: Exercise Physiology*
*Unit 27: Advanced Nutrition*
Unit 4: Professional Skills

<table>
<thead>
<tr>
<th>Unit code</th>
<th>M/616/1683</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit type</td>
<td>Core</td>
</tr>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

This unit is assessed by a Pearson-set assignment. The project brief will be set by the Centre, based on a theme provided by Pearson (this will change annually). The theme and chosen project within the theme will enable students to explore and examine a relevant and current topical aspect of sport.

Developing appropriate professional skills is fundamental to becoming a sport scientist and will open up an array of career opportunities within sport science. To be a sport scientist, individuals must develop a range of professional skills that will develop their understanding of research methods in the field of Sport and Exercise Science. Research methods are used within Sport and Exercise Science to develop human knowledge on a given topic. Without research, there would be very little validity and reliability to any of the applied work that is conducted within the field.

The aim of this unit is to develop students’ knowledge and understanding of the skills and techniques necessary to carry out Sport and Exercise Science-related research. Research in Sport and Exercise Science has global significance and is essential in influencing the development of high-quality participation and performance and, fundamentally, promoting the health and wellbeing of individuals all over the world. Developing the skills and knowledge necessary to conduct research is, therefore, essential in order to promote sports participation and performance and develop healthier nations.
On completion of this unit, students will have developed an understanding of the professional skills necessary to conduct research in the field of Sport and Exercise Science. The knowledge and skills gained from this unit will develop students’ academic skills and so it is well suited to individuals wanting to progress into further study within Sport and Exercise Science or develop a career as a sport scientist in one of the many disciplines that Sport and Exercise Science has to offer.

*Please refer to the accompanying Pearson-set Assignment Guide and the Theme Release document for further support and guidance on the delivery of the Pearson-set unit.
Learning Outcomes

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

1. Discuss the skill requirements of a sport scientist
2. Explore the research process within Sport and Exercise Science
3. Examine quantitative research methods within Sport and Exercise Science
4. Review literature relevant to Sport and Exercise Science.
Essential content

LO1 Discuss the skill requirements of a sport scientist

Professional skills:

IT skills – literature searches, e.g. manual searching, search engines, journal databases, e.g. Sport Discuss, PubMed, Google Scholar; review of digital primary research, e.g. how to read research articles, how to summarise a research article, e.g. writing a journal patch, identifying the aims of the study, identifying the research methods used, identifying the key findings, identifying the strengths and limitations of the research

Data analysis – use of ICT-based analysis techniques, e.g. Excel, SPSS (Statistical Package for Social Sciences), e.g. inputting data, interpreting statistical results, identifying statistical significance, Validity and reliability of data.

Time management, e.g. organisational skills, prioritising workload, setting research objectives, reliable estimate of research time

Problem-solving, e.g. identification of research need/problem, problem analysis and clarification through current research, generating research ideas to identify the problem, identifying solutions following research, consideration of the implications of the research and how it will solve the problem, using research to develop interventions

Analytical skills, e.g. analysing information, checking for accuracy of information, collecting information, comparing information, critical thinking, data collection and analysis, making appropriate decisions, evaluating information, logical thinking, making a judgement, prioritising information

Skills assessment:

Methods of assessment, e.g. skills audit (personal profile using appropriate self-assessment tools, SWOT analysis (strengths, weaknesses, opportunities, threats)
LO2 Explore the research process within Sport and Exercise Science

Purpose of research:

Why research? Identifies, develops and improves gaps in sport and exercise participation and performance, promotes healthier nations, extends knowledge and understanding, improves own professional development, informs other relevant searches involved in sports participation and performance, i.e. Sports England, local authority sports development.

Who conducts research in the sport science field – sport and exercise psychologists, sports nutritionists, biomechanic specialists, physiology specialists.

Types of research undertaken – quantitative, qualitative.

The research process:

What is research? Definitions and characteristics

Research process – evolving nature of the research process, steps taken when carrying out research (selecting a topic, developing research aims, objectives, questions and hypotheses, conducting a literature review, selecting an appropriate methodology for data collection, selecting an appropriate sample for the study, collecting primary data, conducting data analysis, discussing results, e.g. reject or accept hypotheses, drawing conclusions, identifying research limitations following execution.

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

Ethical and legal issues, e.g. British Association of Sport and Exercise Science (BASES) code of conduct, informed consent, confidentiality, data protection, competence levels.

Ethics and ethical clearing and its role in the research process.
LO3 Examine quantitative research methods within Sport and Exercise Science

Research designs:
Quantitative designs, e.g. experimental designs (to establish cause and effect), non-experimental designs, e.g. cross-sectional, longitudinal, correlational
Quantitative data collection – laboratory, field-based, questionnaires, observations, methods of recording data
Quantitative data analysis – organising and displaying data effectively, measures of central tendency (mode, median and mean), measures of variability (range, variance and standard deviation), selecting appropriate tests, e.g. type of data, number and type of variables, number of groups, parametric tests, e.g. t-tests, Pearson Product Moment Correlation Coefficient, non-parametric tests, e.g. Chi Square, Man-Whitney U, Spearman’s Rank Order Correlation, Wilcoxon Signed-Rank test, interpreting levels of significance, one-tailed versus two-tailed, type I and type II errors
Research examples relevant to Sport and Exercise Science, e.g. sport and exercise psychology, exercise physiology, biomechanics, sports nutrition

LO4 Review literature relevant to Sport and Exercise Science

The literature review process:
Purpose of a literature review, e.g. identify gaps in research, justify the appropriateness of the research question, provide up-to-date information on research in the field of study, identify similar findings, inconsistencies in research, generate further research ideas

Conducting a literature review
Sources – internet, books, journals, reports, websites, databases, primary and secondary sources
Reading techniques to assess validity

Appropriateness of literature, e.g. scanning, skimming, identification of keywords
Methods used for searching, e.g. Sports Discuss, using key terms
Assessing the validity and reliability of sources:
Appearance, method used, timeliness, applicability
Presentation of literature review
Academic writing style
Use of referencing format(s)
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Discuss the skill requirements of a sport scientist</td>
<td><strong>P1</strong> Explain the skill requirements of a sport scientist</td>
<td><strong>D1</strong> Justify areas for improvement in your own professional skills</td>
</tr>
<tr>
<td><strong>P2</strong> Discuss the use of professional skills when working as a sport scientist</td>
<td><strong>M1</strong> Assess your own professional skills</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Explore the research process within Sport and Exercise Science</td>
<td><strong>P3</strong> Explain the research process relevant to Sport and Exercise Science</td>
<td><strong>D2</strong> Justify the importance of ensuring validity and reliability within the research process</td>
</tr>
<tr>
<td><strong>P4</strong> Discuss the purpose of research in the field of Sport and Exercise Science</td>
<td><strong>M2</strong> Analyse key issues in the research process within the field of Sport and Exercise Science</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Examine quantitative research methods within Sport and Exercise Science</td>
<td><strong>P5</strong> Explain quantitative research designs relevant to Sport and Exercise Science</td>
<td><strong>D3</strong> Justify appropriate quantitative research methods for a Sport and Exercise Science research example</td>
</tr>
<tr>
<td><strong>P6</strong> Conduct statistical analysis using an ICT-based analysis technique</td>
<td><strong>M3</strong> Assess the effectiveness of quantitative research design and data collection methods relevant to Sport and Exercise Science</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Review literature relevant to Sport and Exercise Science</td>
<td><strong>P7</strong> Conduct a literature review on a Sport and Exercise Science-related topic</td>
<td><strong>D4</strong> Evaluate the outcome of a literature review, making recommendations for future research</td>
</tr>
<tr>
<td><strong>P8</strong> Summarise current knowledge about a research topic following literature review</td>
<td><strong>M4</strong> Assess the outcome of a literature review, making reference to the validity and reliability of the research</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

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

Links
This unit links to the following related units:

Unit 8: Lifestyle Coaching
Unit 10: Technology in Sport
Unit 14: Research Project
Unit 24: Personal & Professional Development
Unit 25: Work Experience
Unit 36: Applied Lifestyle Coaching.
Introduction

Coaching has become a diverse role within the sports industry. It is as important as ever that coaches understand the participants they work with and are prepared to deliver excellent coaching practice. However, it is crucial to be able to understand the individual requirements and the specific needs of participants and to address these through an emphasis on skill development. Having the knowledge to adapt your practice in order to ensure you create an environment for personal development and for the athlete to meet their specific goals is key. Instilling the right coaching environment can only be developed once both coaching practice and skill development is understood.

The aim of this unit is to provide students with the knowledge and understanding of coaching practice and the skill development associated with athlete performance. Students will engage in researching the impact of different coaching practices, working in various environments, utilising resources, developing skills and planning effective sessions. They will gain an understanding of the importance of developing sessions dependent on the group’s demographics.

As students progress through this unit, they will gain the practical and technical knowledge to review the positives and negatives of coaching practice and skill development and so gain a competitive edge. Further, they will understand how to plan effective coaching sessions that meet the needs of the group they are leading.

The knowledge, understanding and skill sets gained in this unit will help students to appreciate the varied coaching environments in which they might work. They will have learned how to be specific to the individuals they are coaching and ensure they apply the relevant skill development.
Learning Outcomes

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

1. Explain the key principles of coaching practice and the environmental factors that impact on skill development

2. Compare coaching practice requirements to enhance athlete performance for a range of participants

3. Investigate the coaching, teaching and learning styles that are used to develop a range of participants within an effective learning environment

4. Reflect on delivered coaching sessions that demonstrate appropriate skill development for a range of participants.
Essential content

LO1  Explain the key principles of coaching practice and the environmental factors that impact on skill development

*Key principles:*
Role of the coach
Knowledge
Communication styles and methods
Professional relationships
Development experience
Approach of self-development and CPD
Ethical approach to all participants

*Coaching practice:*
Practice design
Feedback to improve performance
Reflective practice
Self-awareness
Safeguarding and safety
Lifestyle of the athlete
Sports science influences
Leadership styles

*Environmental factors:*
Motivational climate
Safeguarding
Practice
Competitive situations and games
Parents and others
LO2 Compare coaching practice requirements to enhance athlete performance for a range of participants

*Phases of learning:*
Learning theory, e.g. Fitts and Posner’s (1977) three-stage model
Kolb’s learning cycle
Characteristics of learning stages
Performance plateaus
Changes in aspects of performance with learning
Implications for practice

*Transfer of learning:*
Positive and negative transfer, e.g. zero transfer, intra-task transfer, intertask
Influence of transfer on sequencing skills to be learned
Transfer and instructional methods
Practical applications
Level of participant and individual needs

*Leadership styles:*
The influence of leadership on athletes
Types of leaders
Requirements of leaders to meet the needs of the participant
Leadership styles and behaviours

*Range of participants:*
Children
Youth
Adult
Talent development
High performance
LO3 Investigate the coaching, teaching and learning styles that are used to develop a range of participants within an effective learning environment

*Coaching and teaching styles:*
- Teaching styles (autocratic, democratic, laissez-faire)
- Coaching styles, e.g. group and one-to-one sessions
- Practical and theoretical sessions
- Technical and tactical sessions

*Learning styles:*
- Styles, e.g. visual, auditory, kinesthetic
- Relationship with different teaching and coaching styles
- Be able to create an effective learning environment for leading sports activities

*Range of participants:*
- Children
- Youth
- Adult
- Talent development
- High performance

*Learning environment:*
- Relationship with different teaching and coaching styles
- Be able to create an effective learning environment for leading sports activities
- Practice
- Competition
- One-to-one and team
- Motivational climate
- Level of participant and individual needs
LO4 **Reflect on delivered coaching sessions that demonstrate appropriate skill development for a range of participants**

*Planning sessions:*
Factors in session planning, e.g. goals, nature of the task, environmental factors, individual differences of the student, learning styles

*Running a session:*
Leadership behaviours, e.g. 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

*Practice design:*
Whole- and-part learning methods
Practice conditions (massed, distributed, fixed, variable)
Types of guidance (visual, verbal, manual, mechanical)
Contextual interference

*Reflective practice:*
Reflective practice models and approaches
Evaluation techniques
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

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explain the key principles of coaching practice and the environmental factors that impact on skill development</td>
<td><strong>P1</strong> Describe the key principles of coaching practice</td>
<td><strong>M1</strong> Discuss the key principles of coaching practice and the environmental factors that impact on skill development</td>
<td><strong>D1</strong> Justify the key principles of coaching practice and the environmental factors that impact on skill development</td>
</tr>
<tr>
<td><strong>P2</strong> Explain the environmental factors that impact on skill development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Compare coaching practice requirements to enhance athlete performance for a range of participants</td>
<td><strong>P3</strong> Compare the different coaching practice requirements for a range of participants</td>
<td><strong>M2</strong> Explore the coaching practice requirements to enhance athlete performance for a range of participants</td>
<td><strong>D2</strong> Compare the coaching practice requirements to enhance athlete performance for a wide range of participants to indicate the distinct differences</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate the coaching, teaching and learning styles that are used to develop a range of participants within an effective learning environment</td>
<td><strong>P4</strong> Investigate the coaching, teaching and learning styles that are used to develop a range of participants</td>
<td><strong>M3</strong> Explain the factors that can impact on the coaching, teaching and learning styles of a coach when working with a range of participants</td>
<td><strong>D3</strong> Analyse the coaching, teaching and learning styles of a coach when creating an effective learning environment when working with a range of participants</td>
</tr>
<tr>
<td><strong>P5</strong> Describe what makes an effective learning environment to develop a range of participants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>Merit</td>
<td>Distinction</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Reflect on delivered coaching sessions that demonstrate appropriate skill development for a range of participants</td>
<td><strong>M4</strong> Review the planning and delivery of the coaching sessions to show that sufficient plans are put in place to adapt to the unforeseen</td>
<td><strong>D4</strong> Evaluate the delivery of coaching sessions, providing recommendations to improve in the future</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Plan coaching sessions for the acquisition or development of skills for a chosen group</td>
<td><strong>M5</strong> Deliver coaching sessions implementing changes identified as part of reviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Deliver coaching sessions and demonstrate the appropriate leadership behaviours that are required for the chosen group</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pearson BTEC Levels 4 and 5 Higher Nationals in Sport & Exercise Science Specification – Issue 2 – April 2020 © Pearson Education Limited 2020
Recommended resources

Textbooks

Links
This unit links to the following related units:
Unit 2: Fundamentals of Sport & Exercise Psychology
Unit 8: Lifestyle Coaching
Unit 9: Biomechanics
Unit 12: Community Coaching
Unit 15: Advanced Coaching
Unit 23: Physical Literacy
Unit 29: Teaching Practice
Unit 32: Psychology for Performance
Unit 33: Strength & Conditioning for Coaching
Unit 34: Innovation in Coaching
Unit 35: Contemporary Issues in Coaching
Unit 36: Applied Lifestyle Coaching.
Introduction

Fitness is essential to achieving success in sport and is vital for reaching the elite level. Elite athletes are capable of achieving amazing tasks like sprinting the final 100 metres in a 10,000-metre race, or sprinting the full length of a football pitch in the 90th minute of a game – something which can only be achieved by reaching optimal levels of fitness.

Training, fitness and testing can be applied within all areas of sport and exercise science because it examines the different fitness requirements of different sports, the different training methods that can develop these areas and the adaptations that occur within a team or individual as a result of these adopted methods. Understanding the principles of training is particularly important for many practitioners, including sports therapists working with sports performers in the later stages of rehabilitation, and sport and exercise scientists working with performers trying to peak for competition.

In addition to athletes performing on centre stage, training and fitness is also important for individuals who want to improve their performance in community sports activities and competitions. It is, therefore, fundamental to living a healthier lifestyle and developing the future health of the nation. With this in mind, it is important for professionals working in the sport and exercise industry to have an understanding of how to design fitness training programmes that meet the needs of a variety of individuals.

Fitness testing plays a vital role in the development of appropriate training programmes and, therefore, before these can be developed, sport and exercise scientists must assess the baseline fitness levels of their athletes. Developing an understanding of how to conduct field and laboratory based tests is crucial to students seeking a career within the sport and fitness industry. Being able to interpret the results and use them to identify strengths and areas for improvement and predict future performances is also vitally important.
Learning Outcomes

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

1. Explain the principles of training for sport and exercise
2. Assess the fitness levels of different sport and exercise participants
3. Plan safe and effective fitness training programmes for sport and exercise participants
4. Carry out safe and effective fitness training programmes for sport and exercise participants.
Essential content

LO1 **Explain the principles of training for sport and exercise**

*Fitness requirements for sport and exercise:*
Health-related components of fitness – cardiovascular endurance, strength, flexibility, muscular endurance, body composition
Skill-related components of fitness – speed, reaction time, agility, balance, coordination, power

*Principles of training:*
Principles – specificity, progression, overload, reversibility, individual needs/differences, tedium, variance
FITT principles – frequency, intensity, time, type

*Theories of training:*
General adaptation syndrome (GAS) theory, supercompensation cycle, periodisation (phases and cycles), tapering

LO2 **Assess the fitness levels of different sport and exercise participants**

*Laboratory-based tests:*
Laboratory-based testing, e.g. Wingate test, VO₂ max test, onset of blood lactate accumulation test, ventilator breakpoint testing
Appropriateness of tests – validity (internal and external), reliability (absolute, relative), generalisability

*Field-based fitness tests:*
Field-based testing, e.g. multi-stage fitness test, 12-minute Cooper run test, one-mile Rockport walking test, Harvard step test (cardiovascular endurance), 10 rep-max, sit up and press up test (muscular endurance), one rep max, grip strength test (strength), Illinois agility test, side-step test, shuttle run test (agility), stork stand test, balance beam test (balance), vertical jump test, Margaria-Kalamen staircase test (power), wall toss tests, block transfer test (co-ordination), ruler drop test, Batak reaction test (reaction time), skin fold caliper test, bio-electrical impedance (body composition)
Appropriateness of tests – validity (internal and external), reliability (absolute, relative), generalisability
Administration:
Health and safety – following safe testing protocols, pre-exercise client screening (Physical Activity Readiness Questionnaire (PAR-Q), height, weight, blood pressure, lung function) Informed consent
Practicality – selecting tests relevant to the individual, test sequencing and duration

Feedback:
Methods of feedback – verbal and non-verbal
Timing of feedback – at fitness testing session versus after fitness testing session
Interpretation of results – comparison of results to appropriate normative data

Data, setting training targets based on test results and requirements of the sport or exercise activity

LO3 Plan safe and effective fitness training programmes for sport and exercise participants

Training methods:
Endurance training methods, e.g. interval training, resistance training, fartlek training, continuous training
Strength training methods, e.g. free weights training, resistance machines, pyramid training, tri-sets and giant sets
Power training, e.g. plyometric training
Flexibility training, e.g. static stretching, dynamic stretching, proprioceptive neuromuscular facilitation
Core stability training
Strengths and limitations of each type of training
Design an appropriate training programme:
Design – use of fitness test results
Application of the principles of training (specificity, progressive overload, individual needs/differences)
FITT principles (frequency, intensity, time and type)
Use of appropriate training methods
Session planning
Evidence-based practice
Training goals (short-, intermediate and long-term)
Health and safety – PARQ, risk assessment of training area, strategies to avoid overtraining

LO4 Carry out safe and effective training programmes for sport and exercise participants

Carry out a training programme:
Following guidelines, e.g. process of completing different training methods, training at recommended levels

Review of a training programme:
Use of technology to record and review training programme – mobile phone fitness trackers e.g. My Fitness Pal and Strava, action cameras, e.g. GoPro cameras
Strengths and areas for improvement
Repeated fitness test results
Review of training goals – short-, intermediate and long-term goals
Recommendations for future development
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1 Explain the principles of training for sport and exercise</strong></td>
<td><strong>M1 Assess the fitness requirements of selected sport and exercise activities</strong></td>
<td><strong>D1 Analyse how the principles of training can be used to meet the fitness requirements of selected sport and exercise activities</strong></td>
</tr>
<tr>
<td><strong>P1 Examine the components of fitness in relation to sport and exercise</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P2 Illustrate the principles of training in relation to sport and exercise</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2 Assess the fitness levels of different sport and exercise participants</strong></td>
<td><strong>M2 Analyse fitness test results in relation to appropriate normative data</strong></td>
<td><strong>D2 Justify the choice of fitness tests for a selected sport and exercise participant</strong></td>
</tr>
<tr>
<td><strong>P3 Explain appropriate fitness tests for a selected sport and exercise participant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P4 Administer suitable fitness tests for sport and exercise participants</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3 Plan safe and effective fitness training programmes for sport and exercise participants</strong></td>
<td><strong>M3 Justify the design of a fitness training programme for a selected individual and their specific activity</strong></td>
<td><strong>D3 Evaluate how the design of a fitness training programme will meet the needs of a selected individual and their specific activity</strong></td>
</tr>
<tr>
<td><strong>P5 Explain fitness training methods suitable for a selected individual and their specific activity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P6 Plan a fitness training programme suitable for a selected individual and their specific activity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO4 Carry out safe and effective training programmes for sport and exercise participants</strong></td>
<td><strong>M4 Analyse the effectiveness of a fitness training programme for a selected individual, identifying strengths and areas for improvement and making recommendations for development</strong></td>
<td><strong>D4 Justify recommendations for development in relation to the future goals of the selected individual</strong></td>
</tr>
<tr>
<td><strong>P7 Conduct a fitness training programme for a selected individual</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P8 Review the effectiveness of a fitness training programme for a selected individual</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Journals
*British Journal of Sports Medicine*
*Exercise and Sport Science Reviews*
*Journal of Sports Science*
*Journal of Sports Science and Physical Fitness*
*Journal of Strength and Conditioning Research*
*Research Quarterly for Exercise and Sport*

Websites
www.acsm.org American College of Sports Medicine
www.bases.or.uk British Association of Sport and Exercise Science

Links
This unit links to the following related units:
*Unit 3: Anatomy & Physiology*
*Unit 9: Biomechanics*
*Unit 12: Community Coaching*
*Unit 16: Performance Analysis*
*Unit 18: Exercise Prescription*
*Unit 20: Health Community Engagement*
*Unit 21: Sport & Exercise for Specific Groups*
*Unit 26: Exercise Physiology*
*Unit 33: Strength & Conditioning for Coaching.*
Introduction

Lifestyle plays a crucial role in the health, well-being and quality of life of an individual. Typically, individuals who eat a healthy diet, take part in physical activity, drink in moderation, manage their stress levels and do not smoke live longer and cope better with the demands of everyday life. A poor lifestyle can impact on an individual’s quality of life and increase their risk of developing a number of physical and mental illnesses that include cancer, obesity, coronary heart disease, anxiety and depression. Leading a healthy lifestyle can, therefore, play a major role in the prevention of such illnesses.

For individuals working in the sport and fitness industry, knowledge of the effects of lifestyle on health and wellbeing is very important, along with an understanding of how to improve the lifestyle of a range of individuals. This would be particularly relevant for individuals seeking a career in fitness and health promotion.

Topics included in this unit are physical activity, stress, diet, drug use, smoking and alcohol consumption and the impact of these factors on the health and wellbeing of an individual. Within this unit, students will explore the relationship between lifestyle, health and wellbeing and will investigate current physical activity guidelines and reasons for physical inactivity in different target groups. Students will also explore behaviour change strategies that can be used to help individuals develop a healthier lifestyle.

On successful completion of this unit, students will be able to use appropriate tools to assess the lifestyle of a range of individuals and design, implement and review lifestyle enhancement programmes. They will be able to reassess the lifestyle of a selected individual following completion of the programme and review the effectiveness of the programme in facilitating behaviour change. Throughout the unit, students will develop skills such as communication, interpretation and analysis which are crucial for gaining employment within the sport and fitness industry and developing academic competence.
Learning Outcomes

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

1. Examine the role of physical activity in the maintenance of a healthy lifestyle
2. Investigate the impact of lifestyle factors and physical inactivity on health and wellbeing
3. Plan lifestyle enhancement programmes for selected individuals
4. Review lifestyle enhancement programmes for selected individuals.
**Essential content**

**LO1  Examine the role of physical activity in the maintenance of a healthy lifestyle**

*Benefits of physical activity:*

Physical benefits – management and prevention of disease, e.g. obesity, coronary heart disease, osteoporosis

Psychological benefits – development of a positive psychological wellbeing, e.g. reducing stress, anxiety and depression and developing self-confidence, self-esteem and a positive self-concept, increase in emotional intelligence

Social benefits, e.g. sense of belonging, development of social relations

*Recommended levels of physical activity:*

Use relevant guidelines for levels of physical activity, i.e. ACSM (American College of Sports Medicine) guidelines

**LO2  Illustrate the impact of lifestyle factors and physical inactivity on health and wellbeing**

*Lifestyle factors:*

Excessive stress – causes, e.g. internal, environmental, personal and occupational, health and wellbeing risks, e.g. hypertension, angina, stroke, heart attack, ulcers, anxiety and low mood

Drug use – smoking (health risks, e.g. coronary heart disease, lung cancer, bronchitis and emphysema, excessive alcohol (health and wellbeing risks, e.g. stroke, cirrhosis, hypertension and depression, recreational drug use (health and wellbeing risks, e.g. high blood pressure, depression and anxiety)

Poor diet – health and wellbeing risks, e.g. obesity (positive energy balance, health risks associated with obesity, e.g. increased cholesterol (LDLs), atheroma, development of arteriosclerosis, Type II diabetes, low self-esteem, negative body image
Factors that affect lifestyle choice – cultural factors (e.g. religious beliefs, fasting), family-related factors (e.g. parental influence on children and young people, impact of being a single parent, financial income), occupational factors (e.g. hours of work, reliance on childcare), social factors (e.g. friends, peer pressure), personal factors (e.g. age, gender, hobbies, interests, injury, illness, disability), educational factors (e.g. school physical education, healthy school dinners, extra-curricular opportunities) and environmental factors (location and proximity to local facilities, quality of local provision)

**Target groups:**
Range of individuals, e.g. adults, young people, children, elderly, minority groups, women and people with a disability

**Physical inactivity:**
Reasons for physical inactivity – religious and cultural reasons, psychological reasons, e.g. social physique anxiety, physical reasons e.g. illness
Health and wellbeing risks, e.g. obesity, hypertension, coronary heart disease, and negative self-concept

LO3 **Plan lifestyle enhancement programmes for selected individuals**

**Assess lifestyle factors:**
Interview (one-to-one consultation)
Lifestyle questionnaire – levels of physical activity, diet, drug use (smoking, alcohol consumption and recreational drug use) and stress levels
Behaviour change – precontemplation, contemplation, preparation, action and maintenance
Barriers to change

**Plan lifestyle improvement programmes:**
Goal setting – SMART (specific, measurable, achievable, realistic and time-bound) goals (short-, intermediate, long-term).
Processes of change:
precontemplation to contemplation, e.g. consciousness raising, environmental reevaluation, dramatic relief, social liberation
contemplation to preparation, e.g. self-re-evaluation
preparation to action, e.g. self-liberation, helping relationships, counter conditioning
action to maintenance, e.g. reinforcement management, stimulus control.
Physical activity changes – unstructured inclusion into everyday life, e.g. using stairs rather than lifts, gardening, vigorous hoovering, walking to work
Structured changes, e.g. accessing provision in local area (exercise classes, run/walking groups)
Diet changes, e.g. balanced diet to include appropriate levels of macro (carbohydrate, fats and proteins) and micro (vitamins, minerals, fibre), nutrients, reduction in saturated fat, inclusion of unsaturated fat, e.g. fish oils, correct levels of protein, reduction in the intake of high G.I carbohydrates, correct levels of hydration
Following healthy eating guidelines, e.g. Eatwell Plate)
Changes to reduce stress, e.g. inclusion of time for hobbies and socialising

LO4 Review lifestyle enhancement programmes for selected individuals

Methods:
Interview – one-to-one consultations
Peer and self-evaluation
Lifestyle questionnaires

Effectiveness:
Fit for purpose, e.g. modify activities, changes to maintain interest and motivation
Review of goals – short-, intermediate and long-term goals
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Examine the role of physical activity in the maintenance of a healthy lifestyle</td>
<td><strong>M1</strong> Examine the benefits of meeting physical activity guidelines for adults</td>
<td><strong>D1</strong> Analyse the relationship between physical activity and the development of a healthier lifestyle</td>
</tr>
<tr>
<td><strong>P1</strong> Describe the physical, psychological and social benefits of physical activity</td>
<td><strong>M2</strong> Assess factors that affect lifestyle choice and the impact they have on health and wellbeing</td>
<td><strong>D2</strong> Evaluate the relationship between lifestyle, health and wellbeing</td>
</tr>
<tr>
<td><strong>P2</strong> Present physical activity guidelines for adults</td>
<td><strong>P3</strong> Explain the impact of stress, smoking, excessive alcohol consumption, poor diet and physical inactivity on health and wellbeing</td>
<td><strong>P4</strong> Identify the reasons for physical inactivity for a range of individuals</td>
</tr>
<tr>
<td><strong>LO2</strong> Investigate the impact of lifestyle factors and physical inactivity on health and wellbeing</td>
<td><strong>M3</strong> Analyse the design of a lifestyle enhancement programme for a selected individual, commenting on behaviour change strategies</td>
<td><strong>D3</strong> Justify the design of a lifestyle enhancement programme and use of behaviour change strategies for a selected individual</td>
</tr>
<tr>
<td><strong>P5</strong> Compare and contrast the lifestyle of selected individuals</td>
<td><strong>P6</strong> Plan a lifestyle enhancement programme for a selected individual</td>
<td><strong>M4</strong> Examine the strengths and areas for improvement of the lifestyle enhancement programme for a selected individual, making recommendations for future development</td>
</tr>
<tr>
<td><strong>LO3</strong> Plan lifestyle enhancement programmes for selected individuals</td>
<td><strong>P7</strong> Implement the lifestyle enhancement programme for a selected individual</td>
<td><strong>D4</strong> Justify the recommendations made in relation to the development of a healthier lifestyle</td>
</tr>
<tr>
<td><strong>LO4</strong> Review lifestyle enhancement programmes for selected individuals</td>
<td><strong>P8</strong> Review the lifestyle enhancement programme for a selected individual, identifying strengths and areas for improvement</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Journals
*American College of Sport Medicine’s Health and Fitness Journal*
*British Medical Journal*
*Journal of Physical Activity and Health*
*Journal of Sport and Exercise Psychology*
*Journal of Sports Medicine and Physical Fitness*

Websites
www.nhs.uk  Physical and Psychological illness, signs, symptoms and treatment
www.nutrition.org.uk  British Nutrition Foundation
www.acsm.org  American College of Sports Medicine
www.who.int  World Health Organisation
www.doh.gov.uk  Department of Health
Links
This unit links to the following related units:

Unit 1: Nutrition
Unit 2: Fundamentals of Sport & Exercise Psychology
Unit 3: Anatomy & Physiology
Unit 8: Lifestyle Coaching
Unit 18: Exercise Prescription
Unit 19: Contemporary Issues in Health
Unit 20: Health Community Engagement
Unit 21: Sport & Exercise for Specific Groups
Unit 22: Physical Education & School Sport
Unit 27: Advanced Nutrition
Unit 36: Applied Lifestyle Coaching
Unit 8: Lifestyle Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>F/616/1686</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Lifestyle coaching involves a professional relationship which facilitates an individual's or group's performance, health and personal development. It is a profession which is becoming increasingly recognised throughout the world. The lifestyle coach works with clients to help them achieve what they want from life and empowers the client to take positive actions towards achieving those goals. Lifestyle coaching is future and action orientated.

This unit enables students to develop knowledge and understanding of the theories, principles and skills required for successful lifestyle coaching. Students will examine theories of human intelligence and investigate individual behaviours and learning styles. They will enhance their communication skills through observation and powerful questioning. Students will broaden their coaching skills by learning models for change that will facilitate positive action. This unit will allow the student to develop insight into the different approaches to lifestyle coaching and to key systems and strategies used in coaching.

Students will also learn about different communication styles, explore the importance of effective communication and learn how to create and build a professional relationship with a client. Students will research different coaching processes employed by a lifestyle coach in order to facilitate personal projects, business success, diverse life challenges and transitions. They will investigate key coaching principles and learn how to effectively set goals for an individual's needs and future planning. They will also learn the importance of effective record-keeping.
Learning Outcomes

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

1. Analyse the theory and processes underpinning lifestyle coaching
2. Explore the theories of human intelligence
3. Investigate different methods of effective communication
4. Demonstrate how to facilitate positive action to effect personal change and how to record and collate results.
**Essential content**

**LO1 Analyse the theory and processes underpinning lifestyle coaching**

Specific role of a counsellor, therapist, psychotherapist, mentor, life coach and other professionals

Coaching ethics and regulation as set out by the International Coaching Federation (ICF)

Coaching agreement and the methodology involved in creating such an agreement

Coaching methodologies appropriate to specific scenarios

Limitations of the role of life coach

**LO2 Explore the theories of human intelligence**

Theories of intelligence

Effective adaptation and different cognitive processes, e.g. perception, learning, memory, reasoning and problem-solving

Responses to situations, e.g. thoughts, mood, behaviours, physical reaction and environment

Emotional intelligence, self-awareness, self-regulation, motivation, empathy, social skills

Cognitive behavioural methods of coaching

Actions, cognitions and emotions, ACE FIRST model of individual change and how this can be used to set primary goals

Use primary goals to set specific goals for change
LO3 Investigate different methods of effective communication

Active listening

Different forms of communication, e.g. body language, verbal and non-verbal communication, bottom-lining, seeking statements, encouragement, affirmation and reinforcement

Powerful questioning invoking insight, discovery, moving the client forward and goal-setting possibilities

Skills involved in communication, direct and indirect communication, feedback, goal setting, objectives, tasks, reframing, visualisation, painting a picture of the scenario from a different perspective

Enabling self-awareness with the client by employing different skills and processes

LO4 Demonstrate how to facilitate positive action to effect personal change and how to record and collate results

Goal setting using a variety of skills that promote self-discovery, e.g. brainstorming, explorative engagement, challenging assumptions and provoking thought

Methods to motivate and empower the client, bring forward ideas and create a plan for future action

Different templates that may enhance brainstorming, investigative questioning, goal setting, future planning

Use of the GROW model

Coaching plan, incorporate goals, limitations, targets, time limits, accountability, objectives for successful outcomes

Record-keeping, confidentiality, data protection
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Analyse the theory and processes underpinning lifestyle coaching</td>
<td><strong>P1</strong> Consider the importance of regulation and ethics in the coaching profession</td>
<td><strong>D1</strong> Analyse case studies and make suggestions as to which profession you would refer a client</td>
</tr>
<tr>
<td><strong>P2</strong> Discuss why a coaching agreement is important for both the client and the coach</td>
<td><strong>M1</strong> Using case studies to explore what coaching methodologies might be used when dealing with clients during a coaching session</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Explore the theories of human intelligence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Describe the theories of human intelligence in detail</td>
<td><strong>M2</strong> Assess reactions to different situations while applying the ACE model of individual change when creating specific client goals</td>
<td><strong>D2</strong> Construct a scenario where the ACE FIRST plan may be implemented to create change and present evidence of your thought processes</td>
</tr>
<tr>
<td><strong>P4</strong> Demonstrate your knowledge of human intelligence through a variety of cognitive processes in a lifestyle coaching session</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate different methods of effective communication</td>
<td><strong>P5</strong> Discuss the different ways in which we communicate</td>
<td><strong>D3</strong> Analyse the different types of learning styles and give suggestions of how they may be employed during a session</td>
</tr>
<tr>
<td><strong>P6</strong> Investigate ways to gain insight into a client's thoughts and ideas relating to personal change</td>
<td><strong>M3</strong> Examine the range of communication skills that may be utilised while working with a client</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Demonstrate how to facilitate positive action to effect personal change and how to record and collate results</td>
<td><strong>P7</strong> Outline how you would assist a client in goal setting</td>
<td><strong>D4</strong> Design templates that are relevant to coaching sessions and reflect on the importance of record-keeping</td>
</tr>
<tr>
<td><strong>P8</strong> Create a coaching plan to incorporate these goals</td>
<td><strong>M4</strong> Evaluate different techniques to motivate, empower and create plans for the benefit of the client</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
Lifecoaching.com
Resources
Report
General reference

www.animascoaching.com
Free E books
Research
Videos

Links
This unit links to the following related units:
Unit 4: Professional Skills
Unit 5: Coaching Practice & Skill Development
Unit 7: Physical Activity Lifestyle & Health
Unit 10: Technology in Sport
Unit 18: Exercise Prescription
Unit 20: Health Community Engagement
Unit 36: Applied Lifestyle Coaching.
Unit 9: Biomechanics

<table>
<thead>
<tr>
<th>Unit code</th>
<th>H/616/0952</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

You are watching the Olympic Games on television when you see a goalkeeper successfully saving a goal, sending the ball over the crossbar. The technique they use looks very awkward. They approach the ball from the side, but land safely. You think to yourself, “How can they jump so high using such an odd-looking technique? There must be another way that is just as effective and more graceful looking?” Biomechanics helps provide you with some insights to answer this, and other questions you have about human movement in sport.

Sports biomechanics is the branch of sport and exercise science which 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. The aim of this unit is to develop students’ understanding of biomechanical principles and techniques used to improve individual or team sport performance.

The topics included in this unit are: traditional principles of biomechanics, essential practical techniques in sports biomechanics, key mechanical principles in sport performance, how to conduct notational analysis of performance and analysing sports performance using biomechanical models.

On successful completion of this unit, students will start to adopt an evidence-based practice approach to their work, applying the principles of biomechanics. Students will be able to record sports performance and analyse complex technical and numerical data. They will learn to identify strengths and areas for improvement as well as present their findings using suitable and professional communication methods, all while suggesting new approaches for further development.

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

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

1. Describe biomechanical principles in sporting contexts
2. Develop biomechanical techniques to record sport performances
3. Carry out notational analysis of performance
4. Explore sport performances against biomechanical models.
Essential content

LO1 **Describe biomechanical principles in sporting contexts**

*Discuss biomechanical principles:*

Planes and axes of motion
Kinematics (definition, linear kinematics, rotational kinematics, projectile motion)
Kinetics (definition, linear kinetics, rotational kinetics, friction, impact, Newton’s laws and types of forces)
Fluid mechanics (viscosity, fluid kinematics, types of flow, drag forces, lift forces, Bernoulli principle and Magnus effect)

LO2 **Develop biomechanical techniques to record sport performances**

*Recording sport and exercise performance:*

Investigate planning skills (participant preparation, equipment preparation)
Explore recording techniques (digital photography, video recording, two-dimensional and three-dimensional recording)
Revise recording principles (frame rate, horizontal scaling, vertical referencing, perspective error, validity, reliability, accuracy, precision)
Discuss guidelines for recording techniques and recording principles

LO3 **Carry out notational analysis of performance**

*Notational analysis:*

Investigate model of technique analysis (qualitative or subjective analysis and quantitative analysis)
Underline background to manual notation systems
Revise background to electronic notation programmes
Formulate sport-specific performance criteria
Solve data collection and interpret data analysis
Discuss effective methods of displaying and presenting data
Providing feedback – revise the use of appropriate language for athletes and coaches

Discuss effective methods of providing recommendations for future performance

How current literature can be used to support recommendations for future performance

Revise the application of appropriate methods for target setting (outcome, performance and process goals)

LO4 **Explore sport performances against biomechanical models**

*Biomechanical models:*

Differentiate literature-based and elite athlete-based numerical models

Revise literature based and elite athlete-based technical models

What are the benefits or detriments of using a combination of literature-based and elite athlete-based models?

Compare performance to ideal models aiming to identify strengths and areas for performance improvement

Provide feedback, using literature to support identified strengths and areas for improvement

Suggest recommendations for future performance, using literature to support recommendations and target setting
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Describe biomechanical principles in sporting contexts</td>
<td><strong>P1</strong> Describe planes, axes of motion and the kinetic principles in a sporting context&lt;br&gt;<strong>P2</strong> Describe kinematic principles and fluid mechanics in sporting contexts</td>
<td><strong>D1</strong> Critically analyse the influence of kinetics and kinematic principles in a sporting context&lt;br&gt;<strong>D2</strong> Evaluate techniques used within the recording session</td>
</tr>
<tr>
<td><strong>D1</strong> Critically analyse the influence of kinetics and kinematic principles in a sporting context</td>
<td><strong>P1</strong> Describe planes, axes of motion and the kinetic principles in a sporting context&lt;br&gt;<strong>P2</strong> Describe kinematic principles and fluid mechanics in sporting contexts</td>
<td><strong>D2</strong> Evaluate techniques used within the recording session</td>
</tr>
<tr>
<td><strong>D2</strong> Evaluate techniques used within the recording session</td>
<td><strong>M1</strong> Discuss how planes, axes of motion and the kinetic principles affect sporting context&lt;br&gt;<strong>M2</strong> Discuss how kinematic principles and fluid mechanics affect sporting context</td>
<td><strong>M3</strong> Justify techniques used within the recording session&lt;br&gt;<strong>M4</strong> Justify performance criteria to be used as part of notational analysis&lt;br&gt;<strong>M5</strong> Provide recommendations on how to improve future performance</td>
</tr>
<tr>
<td><strong>M3</strong> Justify techniques used within the recording session&lt;br&gt;<strong>M4</strong> Justify performance criteria to be used as part of notational analysis&lt;br&gt;<strong>M5</strong> Provide recommendations on how to improve future performance</td>
<td><strong>D3</strong> Critically evaluate the criteria to be used as part of the notational analysis</td>
<td><strong>D4</strong> Justify the performance recommendations made</td>
</tr>
<tr>
<td><strong>LO2</strong> Develop biomechanical techniques to record sport performances</td>
<td><strong>P3</strong> Plan a data collection session to record performance&lt;br&gt;<strong>P4</strong> Record a performance using biomechanical recording techniques</td>
<td><strong>D3</strong> Critically evaluate the criteria to be used as part of the notational analysis&lt;br&gt;<strong>D4</strong> Justify the performance recommendations made</td>
</tr>
<tr>
<td><strong>D3</strong> Critically evaluate the criteria to be used as part of the notational analysis&lt;br&gt;<strong>D4</strong> Justify the performance recommendations made</td>
<td><strong>M3</strong> Justify techniques used within the recording session&lt;br&gt;<strong>M4</strong> Justify performance criteria to be used as part of notational analysis&lt;br&gt;<strong>M5</strong> Provide recommendations on how to improve future performance</td>
<td><strong>M6</strong> Assess the selection of a biomechanical model for a chosen sport&lt;br&gt;<strong>M7</strong> Suggest to the observed participant how to improve their performance</td>
</tr>
<tr>
<td><strong>M6</strong> Assess the selection of a biomechanical model for a chosen sport&lt;br&gt;<strong>M7</strong> Suggest to the observed participant how to improve their performance</td>
<td><strong>P5</strong> Explain manual notation systems and electronic notation systems&lt;br&gt;<strong>P6</strong> Design performance criteria and carry out notational analysis of a sport performance of a selected individual or team</td>
<td><strong>D3</strong> Critically evaluate the criteria to be used as part of the notational analysis&lt;br&gt;<strong>D4</strong> Justify the performance recommendations made</td>
</tr>
<tr>
<td><strong>D3</strong> Critically evaluate the criteria to be used as part of the notational analysis&lt;br&gt;<strong>D4</strong> Justify the performance recommendations made</td>
<td><strong>P6</strong> Design performance criteria and carry out notational analysis of a sport performance of a selected individual or team&lt;br&gt;<strong>P7</strong> Produce feedback for an individual or team based on the notational analysis</td>
<td><strong>M6</strong> Assess the selection of a biomechanical model for a chosen sport&lt;br&gt;<strong>M7</strong> Suggest to the observed participant how to improve their performance</td>
</tr>
<tr>
<td><strong>M6</strong> Assess the selection of a biomechanical model for a chosen sport&lt;br&gt;<strong>M7</strong> Suggest to the observed participant how to improve their performance</td>
<td><strong>P7</strong> Produce feedback for an individual or team based on the notational analysis</td>
<td><strong>D4</strong> Justify the performance recommendations made</td>
</tr>
<tr>
<td><strong>D4</strong> Justify the performance recommendations made</td>
<td><strong>M6</strong> Assess the selection of a biomechanical model for a chosen sport&lt;br&gt;<strong>M7</strong> Suggest to the observed participant how to improve their performance</td>
<td><strong>D4</strong> Justify the performance recommendations made</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.bases.org.uk/biomechanics The British Association of Sport and Exercise Sciences
More about Biomechanics
General reference

isbs.org/about-us/journal International Society of Biomechanics in Sports
Journal
Articles

www.jbiomech.com Journal of Biomechanics
Journal
Articles
Links

This unit links to the following related units:

* Unit 3: Anatomy & Physiology
* Unit 5: Coaching Practice & Skill Development
* Unit 6: Training, Fitness and Testing
* Unit 11: Injury Prevention
* Unit 12: Community Coaching
* Unit 15: Advanced Coaching
* Unit 17: Talent Identification & Development
* Unit 21: Sport & Exercise for Specific Groups
* Unit 26: Exercise Physiology
* Unit 37: Sport Rehabilitation
Unit 10: Technology in Sport

Unit code | K/616/0953
---|---
Unit level | 4
Credit value | 15

Introduction

Technology is integrated into our daily life and is influencing the ways in which we complete everyday tasks. Inevitably, this has filtered into the sporting environment, with the use of technology increasing at all levels as it becomes more affordable and user friendly. Gaining the competitive edge over your opponent is a key objective: the use of technology will aid the identification of performance indicators and gives a platform to efficiently evidence individual improvements. The advancements of technology use are evident in today's professional sport and is increasingly being introduced to the lower levels as people own more portable and wearable technologies. Understanding how to utilise technology in sport will ensure that individuals are ready to integrate it into practice as part of future careers.

The aim of this unit is to provide students with the knowledge and understanding of the impact technology has on sport and the ways in which it supports the athletes' performance developments. Students will engage in researching the impact of technological equipment, facility development, performance-enhancing tools and testing equipment used within sports. They will gain an understanding in the importance of sport's National Governing Bodies (NGB) to set their rules stipulating limitations to allow fair competition, the ethics of implementing technology and the influence it can have on an athlete.

As students progress through the unit, they will gain the practical and technical knowledge to review the positives and negatives of technological advancements influencing athletes to gain a competitive edge. This will lead to students demonstrating the use of technology to assist with their role within a sporting environment.

The knowledge, understanding and skill sets gained in this unit will help students to appreciate the impact of technology in the sports environment and how it can influence an athlete's performance in practice.
Learning Outcomes

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

1. Interpret the influence technological developments have had on sport and exercise performance
2. Investigate technologies that support participants in performance and the ethical implications of use
3. Review the factors that affect technology use in a practical setting
4. Demonstrate the effective use of technology in a practical setting.
Essential content

LO1 Interpret the influence technological developments have had on sport and exercise performance

Development of equipment and facilities:
- Sport-specific equipment, e.g. racquets, bats, balls
- Clothing and footwear, e.g. under layers, specialist shoes, protection
- Facilities (indoor and outdoor), e.g. surface, material, performance properties

Performance enhancement:
- Video analysis, e.g. Dartfish, SportsCode, Prozone
- Testing equipment, e.g. timing gates, portable gas analyser, force plates
- Physiological testing, e.g. gas analysing, heart rates

LO2 Investigate technologies that support participants in performance and the ethical implications of use

Different types of technology used in current sport:
- Equipment used within specific sports
- Personal wearable technology, e.g. heart rate monitors, GPS, activity trackers
- Portable device tools and apps, e.g. apps on tablets and phones
- Performance recording equipment, e.g. video-capturing devices Specialist apps and software
- Software uses and applications
- Specific facilities, e.g. specialist surfaces, scoreboards

Technology for performance:
- Data collection, e.g. video analysis, timing, GPS
- Performance analysis, e.g. video analysis
- Physiological testing, e.g. gas analysing, heart rates
Ethics implications:
The fairness of using technology in performance
Ethical barriers to using technology
Equality of technology across performers
Costs of technology
Technological availability linked to geographical location

LO3 Review the factors that affect technology use in a practical setting

Factors:
Environment
Money, e.g. cost of equipment, training course costs
Time, e.g. set-up times, post activity events
Technical knowledge, e.g. skill set of staff, training needs
Technical support, e.g. number of staff to assist, support and troubleshooting access
Reliability and validity, e.g. whether it measures correctly, the accuracy of techniques used

Use:
To measure performance, e.g. validity and reliability
Record performance, e.g. mechanisms to record and feedback
Analysis of performance, e.g. capturing performance

Practical settings:
Indoors, e.g. temperature, environment
Outdoors, e.g. weather, surface
Facility, e.g. age of facility, equipment available
Area and space, e.g. size, surface, locations
LO4 **Demonstrate the effective use of technology in a practical setting**

*Planning:*
- The task that technology is assisting
- Technical set-up of equipment
- Resources required
- Method of use
- Facility needs and space requirements

*Implementation:*
- Following protocols
- Setting up equipment
- Conducting safe sessions
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Interpret the influence technological developments have had on sport and exercise performance</td>
<td><strong>P1</strong> Assess the influence technological developments have had on sport and exercise performance</td>
<td><strong>D1</strong> Analyse the changes in sport and exercise due to the technological developments that have influenced performance</td>
</tr>
<tr>
<td><strong>LO2</strong> Investigate technologies that support participants in performance and the ethical implications of use</td>
<td><strong>P2</strong> Investigate different technologies that support participants and indicate the ethical implications of using them in performance</td>
<td><strong>D2</strong> Justify the use of different technologies to support participants in performance and the ethical implications identified</td>
</tr>
<tr>
<td><strong>LO3</strong> Review the factors that affect technology use in a practical setting</td>
<td><strong>P3</strong> Review the personal and external factors that will affect technology use in a practical setting</td>
<td><strong>LO3 &amp; LO4</strong> <strong>D3</strong> Analyse the factors that impact on using technology in a practical setting and how it influences performance outcomes on a participant compared to conventional methods</td>
</tr>
<tr>
<td><strong>LO4</strong> Demonstrate the effective use of technology in a practical setting</td>
<td><strong>P4</strong> Plan the effective use of technology in a practical setting</td>
<td><strong>M4</strong> Report on the influence technology has on performance in a practical setting compared to using conventional methods</td>
</tr>
<tr>
<td><strong>P5</strong> Demonstrate the effective use of technology in a practical setting to replace conventional methods</td>
<td><strong>M3</strong> Assess the influence that personal and external factors have on performance in a practical setting due to the use of technology</td>
<td></td>
</tr>
</tbody>
</table>

| **M1** Discuss the advantages and disadvantages of the influences of technological developments | **M2** Differentiate between the types of technology compared to conventional methods that influence performance |
| **D3** Analyse the factors that impact on using technology in a practical setting and how it influences performance outcomes on a participant compared to conventional methods | **D2** Justify the use of different technologies to support participants in performance and the ethical implications identified |
| **P3** Review the personal and external factors that will affect technology use in a practical setting | **M3** Assess the influence that personal and external factors have on performance in a practical setting due to the use of technology |
| **P4** Plan the effective use of technology in a practical setting | **M4** Report on the influence technology has on performance in a practical setting compared to using conventional methods |
Recommended resources

Textbooks

Journals
Sports Technology

Links
This unit links to the following related units:
Unit 4: Professional Skills
Unit 8: Lifestyle Coaching
Unit 14: Research Project
Unit 16: Performance Analysis
Unit 17: Talent Identification & Development
Unit 11: Injury Prevention

<table>
<thead>
<tr>
<th>Unit code</th>
<th>J/616/1687</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Injury prevention comprises a range of efforts and techniques implemented to reduce the risk of injuries. Techniques are used both to prepare the body for external factors that could potentially cause injuries as well as to assist previous and currently injured people to continue competing within a sporting environment.

The aim of this unit is to provide students with an insight into the sports therapy and conditioning sector. Students will be provided with an opportunity to consider different injuries and the implementation of prevention techniques. Throughout the unit, students will consider the identification of different injuries while linking this to the theory of the pain gate cycle and the effects that injuries can inflict on the nervous system. Students will be encouraged to link their musculoskeletal knowledge with the signs and symptoms of different injuries, while considering the benefits of injury prevention techniques.

The unit will provide students with the opportunity to explore the relevant holistic approaches used within injury prevention and identify the different professionals that are involved. They will investigate specific sporting environments and consider where injury prevention is possible. Following on from this, students will design an injury rehabilitation programme for a specific sport scenario.

On completion of this unit, students will be able to produce an injury rehabilitation programme that explains the benefits of injury prevention and will be able to identify the knowledge of relevant professionals that are involved in the process of preventing injury. Furthermore, students will be able to consider holistic approaches to injury prevention. This unit delivers the theoretical and strategical knowledge that is required for students to progress onto sports therapy or injury prevention courses.
Learning Outcomes

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

1. Investigate the theory of the pain gate cycle and link to injury identification
2. Explain the benefits of different types of injury prevention and relevant holistic approaches
3. Identify the professionals involved in injury prevention and their specific roles
4. Design an injury prevention programme for a specific sport scenario.
Essential content

LO1 Investigate the theory of the Pain Gate Cycle and link to injury identification

Pain gate theory:
Sensory nerves, intermediate, motor neurons, the pain cycle
Investigation into the structure and function of the knee ligaments and potential injuries to ACL, PCL, MCL, LCL and consideration of meniscus

Injury identification:
Investigation into signs of injury considering, tendinopathy, first-, second-, third-degree sprains, bruises/contusions, fractures, swellings, bursitis, head injuries, ruptures, concussion and back pain
Identification of the sport-specific causality of injuries, muscular imbalance, overuse, poor rehabilitation of previous injury, poor technique, appropriate muscle strength, muscular endurance and accidental injury

LO2 Explain the benefits of different types of injury prevention and relevant holistic approaches

Holistic approaches, consideration of training the whole body, building around the injury
Benefits of using resistance training for sport specific injuries (strength and conditioning)
Benefits of foam rolling and sports massage
Effects of strapping, taping, hot and cold treatments
Stretching and flexibility training, yoga, pilates and use of body weight
Investigation of the different prevention techniques required for specific clients
Psychological rehabilitation and relapse, training the brain not just the body
Benefits of postural reconstruction
Protective clothing considering pads, footwear, helmets, gloves and others
LO3 Identify the professionals involved in injury prevention and their specific roles

Identify the different professionals that are involved in injury prevention, their responsibilities and the roles they play:

Osteopaths, GPs, chiropractors, and sports and physio therapists, strength and conditioning coaches, first aiders

Identify the professionals responsible for the implementation of medication, pain killers, effects of steroids, anti-inflammatories, considering the positives and negatives

Investigate the effects these medications may have on the roles of other professionals

Identify the involvement of different professionals within a sports team environment:

Teammates, coach, manager, club physiotherapist, club doctor

Consider the pressures that players might face to achieve a level of performance

Support networks involved in assisting with continued engagement

Sports scientists – tracking of muscle strength and performance levels in order to reduce the risk of injury

LO4 Design an injury prevention programme for a specific sport scenario

Review of sports movements and the required strength to complete these movements, e.g. jumping, landing, rotation, specific actions

Player profiling, e.g. size, strength, position, attributes

Consideration of the link between training modalities and sporting environment and the requirements of injury-prone players, e.g. rest, massage, alternative training, weight training, boot camps, pre-season

Consideration of fixture pile ups, lack of rest periods and managing performance while preventing injury, e.g. tactical training sessions, cardiovascular sessions and strength and conditioning

Match/event preparation through training specifically for injury prevention, e.g. strapping, taping, tactical sessions, ice treatments, and managing the effects of travelling

Adaptation of sports coaching sessions to implement prevention techniques, considering the training ground, in the gym and homecare changes
# Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Investigate the theory of the pain gate cycle and link to injury identification</td>
<td><strong>M1</strong> Analyse the effects that injury has on the nervous system</td>
<td><strong>D1</strong> Evaluate the interrelationship between the nervous system and signs of sports injuries</td>
</tr>
<tr>
<td><strong>P1</strong> Outline the pain gate cycle and nervous system</td>
<td><strong>M2</strong> Compare the signs and symptoms for different types of injuries</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Identify the signs and symptoms that are apparent for different types of injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Explain the benefits of different types of injury prevention and relevant holistic approaches</td>
<td><strong>D2</strong> Suggest relevant injury prevention techniques and holistic approaches for a specific sport or exercise injury</td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Identify relevant holistic approaches to injury prevention and their benefits</td>
<td><strong>M3</strong> Analyse the benefits of holistic approaches for a specific sport or exercise injury</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Outline the benefits of different injury prevention techniques for sport and exercise</td>
<td><strong>M4</strong> Evaluate the benefits of different injury prevention techniques for sport and exercise</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Identify the professionals involved in injury prevention and their specific roles</td>
<td></td>
<td><strong>D3</strong> Compare the links between the specific roles of professionals involved in injury prevention</td>
</tr>
<tr>
<td><strong>P5</strong> Indicate the professionals involved in injury prevention and their specific roles</td>
<td><strong>M5</strong> Analyse the involvement of specific professionals within the prevention of injury</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> State the support networks that are available to assist with the prevention of injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Design an injury prevention programme for a specific sport scenario</td>
<td><strong>M6</strong> Justify injury prevention techniques used for a specific sporting environment</td>
<td><strong>D4</strong> Suggest alternatives injury prevention techniques for a specific sporting environment</td>
</tr>
<tr>
<td><strong>P7</strong> Compose an injury prevention programme for a specific sporting environment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.nsmi.org.uk
Articles
Avoid sports injury
General

www.stopsportsinjuries.org
Prevent Injuries
Injury Specific Resources
Research

Links
This unit links to the following related units:

*Unit 3: Anatomy & Physiology*
*Unit 9: Biomechanics*
*Unit 13: Sports Massage*
*Unit 24: Personal & Professional Development*
*Unit 26: Exercise Physiology*
*Unit 33: Strength & Conditioning for Coaching*
*Unit 37: Sports Rehabilitation*
Unit 12: Community Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>L/616/1688</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Coaching is a multifaceted vocation, with sports coaches working in a range of contexts and a variety of cultures. Within these environments, coaches are challenged to work with a range of stakeholders and participants with differing aims, needs and constraints.

Coaching policy has often shaped the engagement of coaches within these environments and challenged governing bodies to address societal issues in highly practical environments using sport as a tool for change. For coaches to work successfully within the sector, they must be able to engage with the rich opportunities to work with participants across the entire life course, from different cultures and with wide-ranging objectives.

This unit challenges students to understand the different cultures and contexts in which sports coaches work, and to understand the role of policy and national governing body initiatives in shaping the pedagogic practice of coaches in the community. Students successfully completing this unit will be able to describe the political landscape of their local coaching environments and understand the challenges and mechanisms for adapting and redesigning sports activities and games to achieve wider outcomes for participants, governing bodies and sporting organisations.

Students will be prepared to consider the challenges of working in a diverse sector and apply theoretical knowledge to plan, deliver and adapt practical coaching sessions to particular contexts across a range of community settings.
Learning Outcomes

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

1. Describe a range of community sport initiatives and policies, both contemporary and historic, which have shaped coaching practice

2. Plan an effective coaching session, underpinned by relevant theoretical concepts, aimed at a specific population group or community context

3. Deliver an effective practical coaching session that addresses the needs of a specific population group or community context

4. Discuss the potential for sport to be used as a tool for addressing wider societal issues.
Essential content

LO1 Describe a range of community sport initiatives and policies, both contemporary and historic, which have shaped coaching practice

*Historic and contemporary coaching policy:*
National policy documents
International policy documents

*Sport for development:*
History of muscular Christianity
Community development
Positive youth development
The 4Cs of coaching (character, competence, connection, confidence)
Sport and social inclusion
Sport and health

LO2 Plan an effective coaching session, underpinned by relevant theoretical concepts, aimed at a specific population group or community context

*Adaptation principles:*
STTEPS principle – space, time/task, equipment, people, speed
Modified games
National governing body initiatives

*Differentiation:*
Long-term athlete development
Physical literacy
Barriers to participation for special population groups
Planning principles:
Progression
Teaching/coaching styles
Activity leadership
Athlete-centred coaching
Teaching and coaching models (e.g. teaching for personal and social responsibility)

Planning for inclusion:
Inclusion spectrum – open, modified, parallel and separate activities

LO3 Deliver an effective practical coaching session that addresses the needs of a specific population group or community context

Effective coaching pedagogy:
Coaching styles
Communication
Adaptation

Reflective practice:
Stages of reflection (in action, on action, retrospective)

Managing risk within coaching practice:
Risk assessment (dynamic, static, objective and subjective
Phases of risk management – primary, secondary, tertiary

Safeguarding in coaching practice:
Safeguarding policy
Ethical issues working with different populations
Good practice guidelines
LO4 Discuss the potential for sport to be used as a tool for addressing wider societal issues

Positive youth development:
Sport for development

*The 4Cs of coaching (character, competence, connection, confidence)*
Coaching for character

Sport and society:
Sport and social inclusion
Gender, inclusion, ethnicity, disability and sport

Sports policy:
National Governing Bodies
Coach education pathways
Sports Leadership
Government policy and funding
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Describe a range of community sport initiatives and policies, both contemporary and historic, which have shaped coaching practice</td>
<td><strong>M1</strong> Analyse the role of the coach in delivering community coaching initiatives</td>
<td><strong>D1</strong> Critically analyse the changing role of the sports coach in community contexts</td>
</tr>
<tr>
<td><strong>P1</strong> Explain how government policy can shape local community sports initiatives</td>
<td><strong>P2</strong> Investigate the impact of different government ideologies and policies upon local community coaching practice</td>
<td><strong>LO2 &amp; LO3</strong></td>
</tr>
<tr>
<td><strong>LO2</strong> Plan an effective coaching session, underpinned by relevant theoretical concepts, aimed at a specific population group or community context</td>
<td><strong>P3</strong> Produce an effective practical session plan specific to a population group or community context</td>
<td><strong>D2</strong> Critically evaluate principles of adaptation/inclusion to address the specific needs of individuals within a population group or community context</td>
</tr>
<tr>
<td><strong>P4</strong> Demonstrate where theoretical frameworks have informed planning for inclusion</td>
<td><strong>M2</strong> Apply principles of differentiation, adaptation and inclusion to address specific needs within your participant group</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Deliver an effective practical coaching session that addresses the needs of a specific population group or community context</td>
<td><strong>P5</strong> Demonstrate effective coaching practice and techniques to address the needs of a specific population group or community context</td>
<td><strong>M3</strong> Reflect upon the effectiveness of your coaching practice and demonstrate principles of adaptation to address the specific needs within your participant group</td>
</tr>
<tr>
<td><strong>P6</strong> Differentiate coaching practice, techniques and activities to address the needs of a specific population group or community context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>Merit</td>
<td>Distinction</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>LO4</strong> Discuss the potential for sport to be used as a tool for addressing wider societal issues</td>
<td><strong>M4</strong> Evaluate the effectiveness of using sport to address wider societal issues</td>
<td><strong>D3</strong> Critically analyse the effectiveness of a local or national community sports initiative in achieving its objectives</td>
</tr>
<tr>
<td><strong>P7</strong> Investigate the use of sport as a tool for development, both nationally and internationally</td>
<td><strong>P8</strong> Describe the use of community sport for addressing societal issues in your local community</td>
<td></td>
</tr>
</tbody>
</table>


Recommended resources

Textbooks

Websites
www.sportdevelopment.org.uk
Sports Development
Resources
Research

www.sportscoachuk.org
UK Coaching
Resource Bank
Research/reference

Links
This unit links to the following related units:
Unit 5: Coaching Practice & Skills Development
Unit 6: Training, Fitness, Testing
Unit 9: Biomechanics
Unit 15: Advanced Coaching
Unit 19: Contemporary Issues in Health
Unit 20: Health Community Engagement
Unit 23: Physical Literacy
Unit 28: Leadership & Management
Unit 34: Innovation in Coaching
Unit 37: Sport Rehabilitation.
Unit 13: Sports Massage

<table>
<thead>
<tr>
<th>Unit code</th>
<th>R/616/1689</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>4</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Sports massage is a form of massage designed to enhance performance and prevent injury for people who are involved in regular physical activity, exercise and/or sport. Moreover, the manipulation of the body’s soft tissues allows the massage therapist to aid the recovery of people with injuries.

The aim of this unit is to provide students with an insight into the sport therapy and rehabilitation sector. This unit delivers both the theoretical and practical knowledge that is required for students to progress onto a sports massage therapist role once an additional massage qualification is obtained. Throughout the unit, students will further their anatomy and physiology knowledge, indicating the links to soft tissue dysfunction and soft tissue process. Furthermore, students will gain knowledge of clinical and professional practices involved in sports massage as well as how to demonstrate practical client assessment and safe and effective sports massage.

This unit will provide students with the opportunity to research and implement theoretical knowledge in a practical massage environment. Additionally, the practical application of legislation and professional practice will prepare the students for self-employed or clinic-based massage, which could be an option should they complete a further qualification in sports massage.

On completion of this unit, students will be able to demonstrate knowledge of the soft tissue repair process and soft tissue dysfunction. Moreover, students will be able to produce a client assessment that considers clinical and professional practice, thus leading to the delivery of safe and effective sports massage. Furthermore, the completion of this unit will allow students to progress onto a sports massage qualification.
Learning Outcomes

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

1. Identify the anatomy and physiology appropriate for sports massage
2. Indicate the specific factors leading to dysfunction of soft tissue and soft tissue repair
3. Apply clinical and professional practice within a sports massage environment
4. Demonstrate sports massage techniques and treatments.
Essential content

**LO1** Identify the anatomy and physiology appropriate for sports massage

- The structure and function of the human cells and tissues
- Characteristics of ligaments and tendons
- The structure and function of the skeletal system and synovial joints
- Location of bony prominences and landmarks
- Origins and Insertions of major muscles and attachment sites
- Structure of the nervous and endocrine systems
- Role of hormones
- Cardiovascular system, flow of blood around the body
- The structure and function of the lymphatic system
- Physiological and psychological effects of sports massage

**LO2** Indicate the specific factors leading to dysfunction of soft tissue and soft tissue repair

- Types, causes and severity of soft tissue injuries
- Process and factors affecting soft tissue repair
- The role of sports massage in soft tissue repair
- Causes and signs of soft tissue dysfunction
- Purpose of sports massage treatments, psychological improvements, pain relief, lymphatic drainage and waste removal
- Benefits of sports massage treatments to promote recovery, increased range of movement, injury rehabilitation
LO3 **Apply clinical and professional practice within a sports massage environment**

Roles and responsibilities of a sports massage therapist

The importance of abiding by legislation and regulation, gaining informed consent from clients and having professional standards

Type of insurance required, public liability

Professional consultations with a contraindications review

How to communicate in a professional manner with different clients

Carrying out an effective assessment, subjective and objective

Gaining accreditation to professional organisations and personal development

Importance of up-to-date, accurate and confidential records

Planning of massage requirements, techniques, timings, depths, type of massage, e.g. pre-event, injury rehabilitation and homecare advice

LO4 **Demonstrate sports massage techniques and treatments**

Client assessment, verbal and physical, allergies, postural checks

Pre-event, post-event and maintenance massage, special awareness due to venue of massage

Risk assessment, equipment checks, selection of mediums

Preparation for client, use of towels as barriers, hand washing

Consideration of own posture and positioning to reduce risk of injury

Range of techniques relevant for client's needs, effleurage, petrissage, tapotement, frictions, vibrations, compressions and shaking

Avoidance of tiring, through range of body parts utilised, e.g. thumbs, knuckles, palms, forearms, elbows

Obtaining client's feedback during the massage through pain scales and communication

Reflection on massage performed and follow-up treatments
# Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Identify the anatomy and physiology appropriate for sports massage</td>
<td><strong>P1</strong> Outline the anatomy and physiology appropriate for sports massage</td>
<td><strong>D1</strong> Evaluate the effectiveness of sports massage on the different areas of the anatomy</td>
</tr>
<tr>
<td><strong>P2</strong> Indicate the physiological and psychological effects of sports massage</td>
<td><strong>M1</strong> Analyse the anatomy and physiology appropriate for sports massage</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Indicate the specific factors leading to dysfunction of soft tissue and soft tissue repair</td>
<td><strong>P3</strong> Identify the dysfunction of soft tissue</td>
<td><strong>D2</strong> Compare the dysfunction of soft tissue and the soft tissue repair process</td>
</tr>
<tr>
<td><strong>P4</strong> State the stages of the soft tissue repair process</td>
<td><strong>M2</strong> Differentiate between dysfunction of soft tissue and soft tissue injuries</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Apply clinical and professional practice within a sports massage environment</td>
<td><strong>P5</strong> Explain clinical and professional practice within a sports massage environment</td>
<td><strong>D3</strong> Justify reasons for using different clinical and professional practices within a sports massage environment</td>
</tr>
<tr>
<td><strong>P6</strong> Design a consultation form with the consideration of contraindications</td>
<td><strong>M3</strong> Analyse clinical and professional practices within a sports massage environment</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Demonstrate sports massage techniques and treatments</td>
<td><strong>M4</strong> Compose a clinical consultation form with the consideration of contraindications</td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Perform sports massage techniques and treatments</td>
<td><strong>M5</strong> Undertake effective sports massage based on postural checks and client’s needs</td>
<td><strong>D4</strong> Evaluate the effectiveness of the sports massage based on techniques used, pain scales and feedback gained</td>
</tr>
<tr>
<td><strong>P8</strong> Carry out client assessment, including postural checks</td>
<td><strong>M6</strong> Apply adaptations to the sports massage based on formative feedback</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.sportstherapyuk.com Sports Therapy UK
About Sports Massage
General Reference
www.stretchcoach.com Stretch Coach
Articles/Sports Massage
General Reference

Links
This unit links to the following related units:
*Unit 3: Anatomy & Physiology*
*Unit 11: Injury Prevention*
*Unit 24: Personal & Professional Development*
*Unit 26: Exercise Physiology*
*Unit 37: Sport Rehabilitation*
Unit 14: Research Project

<table>
<thead>
<tr>
<th>Unit code</th>
<th>L/616/0962</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit type</td>
<td>Core</td>
</tr>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>30</td>
</tr>
</tbody>
</table>

Introduction

This unit is assessed by a Pearson-set assignment. Students will choose their own project based on a theme provided by Pearson (this will change annually). The project must be related to their Specialist pathway of study (unless the student is studying the general pathway). This will enable students to explore and examine a relevant and current topical aspect of sport in the context of a sport environment and their chosen Specialist pathway.

The aim of this unit is to offer students the opportunity to engage in sustained research in a specific field of study. The unit enables students to demonstrate the capacity and ability to identify a research theme, to develop research aims, objectives and outcomes, and to present the outcomes of such research in both written and verbal formats. The unit also encourages students to reflect on their engagement in the research process during which recommendations for future, personal development are key learning points.

On successful completion of this unit students will have the confidence to engage in problem-solving and research activities. Students will have the fundamental knowledge and skills to enable them to investigate workplace issues and problems, determine appropriate solutions and present evidence to various stakeholders in an acceptable and understandable format.

As a result, they will develop skills such as communication literacy, critical thinking, analysis, synthesis, reasoning and interpretation which are crucial for gaining employment and developing academic competence.

*Please refer to the accompanying Pearson-set Assignment Guide and the Theme Release document for further support and guidance on the delivery of the Pearson-set unit.*
Learning Outcomes

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

1. Examine appropriate research methodologies and approaches as part of the research process
2. Conduct and analyse research relevant to a Sport research project
3. Communicate the outcomes of a research project to identified stakeholders
4. Reflect on the application of research methodologies and concepts.
Essential content

LO1 **Examine appropriate research methodologies and approaches as part of the research process**

*Developing a research proposition:*

The importance of developing methodical and valid propositions as the foundation for a research project.

Rationale: the purpose and significance for research question or hypothesis

The value of the philosophical position of the researcher and the chosen methods

Use of Saunders' research onion as a guide to establishing a methodological approach

*Literature review:*

Conceptualisation of the research problem or hypothesis

The importance of positioning a research project in context of existing knowledge

Significance and means of providing benchmarks by which data can be judged

*Qualitative, quantitative and mixed method research:*

Key theoretical frameworks for research

Advantages and limitations of qualitative and quantitative research approaches and methods

LO2 **Conduct and analyse research relevant to a Sport research project**

*Research as a process:*

Research has distinct phases which support a coherent and logical argument

This includes using secondary research to inform a primary, empirical, study

*Selecting a sample:*

The importance of gathering data and information (qualitative or quantitative) to support research analysis

Selecting sample types and sizes that are relevant to the research

Considering sampling approaches and techniques, e.g. probability and non-probability sampling
Ethics, reliability and validity:
Research should be conducted ethically. How this is achieved and reported
Research should also be reliable (similar results would be achieved from a similar sample) and valid (the research measures what it aimed to measure)

Analysing data:
Using data collection tools, e.g. interviews and questionnaires
Using analytical techniques, e.g. trend analysis, coding or typology.

LO3 Communicate the outcomes of a research project to identified stakeholders

Stakeholders:
Who are they?
Why would they be interested in the research outcomes?
What communication method do they expect?

Communicating research outcomes:
Consideration of different methods of communicating outcomes (e.g. written word, spoken word) and the medium (e.g. report, online, presentation). The method and medium will be influenced by the research and its intended audience

Convincing arguments
No matter what the method/medium, all research should be convincing and presented logically where the assumption is that the audience has little or no knowledge of the research process

The importance of developing evaluative conclusions
LO4 Reflect on the application of research methodologies and concepts

Reflection for learning and practice:

Difference between reflecting on performance and evaluating a research project. The former considers the research process, the latter considers the quality of the research argument and use of evidence

Reflection on the merits, limitations and potential pitfalls of the chosen methods

The cycle of reflection:

To include reflection in action and reflection on action

Considering how to use reflection to inform future behaviour and future considerations

Reflective writing:

Avoiding generalisation and focusing on personal development and the research journey in a critical and objective way
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Examine appropriate research methodologies and approaches as part of the research process</td>
<td><strong>M1</strong> Evaluate different research approaches and methodology and make justifications for the choice of methods selected based on philosophical/theoretical frameworks</td>
<td><strong>D1</strong> Critically evaluate research methodologies and processes in application to a sports research project to justify chosen research methods and analysis</td>
</tr>
<tr>
<td><strong>P1</strong> Produce a research proposal that clearly defines a research question or hypothesis supported by a literature review</td>
<td><strong>M2</strong> Discuss merits, limitations and pitfalls of approaches to data collection and analysis</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Examine appropriate research methods and approaches to primary and secondary research</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Conduct and analyse research relevant to a Sport research project</td>
<td><strong>P3</strong> Conduct primary and secondary research, using appropriate methods for a research project that consider costs, access and ethical issues</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Apply appropriate analytical tools, analyse research findings and data</td>
<td><strong>M3</strong> Coherently and logically communicate outcomes to the intended audience, demonstrating how outcomes meet set research objectives</td>
<td><strong>D2</strong> Communicate critical analysis of the outcomes and make valid, justified recommendations</td>
</tr>
<tr>
<td><strong>LO3</strong> Communicate the outcomes of a research project to identified stakeholders</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Communicate research outcomes in an appropriate manner for the intended audience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>Merit</td>
<td>Distinction</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>LO4</strong> Reflect on the application of research methodologies and concepts</td>
<td></td>
<td><strong>D3</strong> Demonstrate reflection and engagement in the resource process leading to recommended actions for future improvement</td>
</tr>
<tr>
<td><strong>P6</strong> Reflect on the effectiveness of research methods applied for meeting objectives of the research project</td>
<td><strong>M4</strong> Provide critical reflection and insight that results in recommended actions for improvements and future research considerations</td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Consider alternative research methodologies and lessons learned in view of the outcomes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Journals
- *International Journal of Quantitative and Qualitative Research*
- *Qualitative Research Journal*

Links
This unit links to the following related units:
*Unit 4: Professional Skills*
*Unit 10: Technology in Sport*.
Unit 15: Advanced Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>J/616/1060</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

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

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

*Pearson BTEC Levels 4 and 5 Higher Nationals in Sport & Exercise Science Specification – Issue 2 – April 2020 © Pearson Education Limited 2020*
<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO4</strong> Deliver a series of coaching sessions to address the aims of a micro-cycle plan targeting the needs of the chosen athlete or squad</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Construct a detailed, progressive series of coaching session plans specific to your athlete's/squad's needs.</td>
<td><strong>M4</strong> Explore how reflective practice helps coaches adapt programmes to respond to developments in athletes/squads.</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Deliver effective coaching sessions addressing the goals of your session plans.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.sportscoachuk.org  Sports Coach Uk
Resource bank
Research and training.

www.uksport.gov.uk  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
Unit 16: Performance Analysis

<table>
<thead>
<tr>
<th>Unit code</th>
<th>M/616/1053</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

The analysis of performance is a complex process that reviews the tactics, techniques and movements of an athlete competing with in their sports. Real-time and lapsed-time analysis is observed in many of today's sports in action and during reflection. The key objective is to enhance interventions to assist the coaching process and elicit performance enhancement. It is used to inform the athlete and coaches on what happened as opposed to perceived outcomes. On average, athletes and coaches can only recall 30% of performance correctly. This demonstrates the importance of performance analysis to ensure that the facts are evidenced to help ensure the correct performance improvements are implemented. The use of technology is paramount to make this an accurate and robust process to give the detailed feedback required to show effective improvements in performance.

The aim of this unit is to provide students with the knowledge and understanding of performance analysis within sport and how it is used to aid development. Students will engage in researching the methods used to analyse performance, how to create a performance profile, practically analyse performance, and carry out a post-event analysis to provide feedback. They will gain an understanding of the importance of the analysis process and how to utilise technology to assist them in completing these tasks.

As students progress through this unit, they will gain the practical and technical knowledge to review the positives and negatives of performance to gain the evidence that will support performance improvements. Further to this, they will understand how to plan effective performance analysis that meets the needs of the observed performer.

The knowledge, understanding and skill sets gained in this unit will help students to appreciate the complexity of performance analysis and the need to use valid and reliable approaches to ensure they give technical feedback to support athletes.
Learning Outcomes

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

1. Evaluate the methods used to analyse sports performance
2. Create a performance profiling system to indicate the key requirements of a selected sport
3. Analyse the sports performance of individuals
4. Carry out a post-event analysis to provide feedback to aid the development of sports performance.
**Essential content**

**LO1** Evaluate the methods used to analyse sports performance

*Performance profiling systems:*
- Types of profiling
- Aims and applied uses
- Assessment of sports and performance
- Construction of a profiling systems
- How to grade and analyse systems
- Ways in which to display performance profiling systems
- Identifying and prioritising identified areas of strength and weaknesses

*Physical fitness tests for analysis:*
- Cardiovascular testing, e.g. Wingate Anaerobic Test, Harvard Step Test, intensity testing
- Muscular testing, e.g. endurance, power, strength
- Skill-related assessment, e.g. flexibility, balance, stability, speed
- Field-based testing, e.g. Illinois Agility Test, sprints, Yo-Yo intermittent recovery test and endurance testing, Global Positioning System (GPS) and distance measuring methods
- Health-related e.g. bioelectrical impedance, body mass index, skinfold

*Psychological tests:*
- Questionnaires and interviews
- Motivation
- Imagery
- Confidence
- Stress
- Competitive anxiety
Technical and tactical analysis:
Real-time and lapsed-time analysis
Quantitative measures, e.g. statistics, performance checklists, positions in play
Qualitative measures, e.g. observations, performance cues, movement styles
The use of technology to assist with analysis, e.g. Dartfish, Sportscode, apps
Video analysis and using software, e.g. using apps and technology
Notational analysis systems

Factors that impact on analysis:
Environment used for testing, e.g. indoor, outdoor, space
Validity and reliability of methods used
Technical knowledge of administrators
Quality of information captured
Time taken and meeting the aims of analysis

LO2 Create a performance profiling system to indicate the key requirements of a selected sport

Understand the requirements of individual and team sports:
Review the performance requirements of different sports to find differences
Observation methods to identify needs and skills

Technical and tactical requirements for success in sports:
Technical skills and techniques, e.g. shooting, passing, movement
Tactical approaches for attacking and defence

Fitness requirements for success in sports:
Physical fitness requirements, e.g. endurance, strength, body composition
Skills-related fitness requirements, e.g. agility, power, speed

Psychological requirements for success in sports:
Psychological requirements, e.g. confidence, aggression, relaxation, emotional intelligence
LO3 Analyse the sports performance of individuals

Assessing the technical and tactical requirements of selected sports:
Analysis of sports performance: technical analysis, notational analysis, accurate recording
Technology-based recording methods, e.g. GPS systems, technique apps

Assessing the fitness requirements of selected sports:
Physical fitness testing, e.g. multi-stage fitness test, VO2 max, Wingate test
Skill-related fitness, e.g. 30m sprint, standing long jump, vertical jump

Assessing the psychological requirements of selected sports:
Questionnaires, e.g. sport competition anxiety test (SCAT)
Interviews to discuss completion based factors that impact on performance

LO4 Carry out a post-event analysis to provide feedback to aid the development of sports performance

Sports performance analysis feedback:
Strengths and areas for improvement
Analysis of data collection
Creation of charts and graphs to show findings
Conclusions made from observations
Methods of delivering outcomes to athletes

Recommendations for improvement:
Physiological recommendations, e.g. training programmes to aid development, training methods to adopt for improving performance
Psychological recommendations e.g. psychological skills training, mental rehearsal techniques

Goal setting:
Goal setting programmes
SMART targets
How to set and implement short-, medium- and long-term goals to aid improvements in performance
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Evaluate the methods used to analyse sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P1</strong> Investigate the methods that are used to analyse sports performance</td>
<td><strong>M1</strong> Evaluate the significance of the different methods of analysis of sports performance</td>
<td><strong>D1</strong> Critically evaluate the methods of sports analysis by providing examples to support judgments made on their effectiveness</td>
</tr>
<tr>
<td><strong>P2</strong> Evaluate the factors that impact on the analysis of sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Create a performance profiling system to indicate the key requirements of a selected sport</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Discuss the requirements of a selected sport</td>
<td><strong>M2</strong> Illustrate a performance profiling system to display the requirements of a selected sport</td>
<td><strong>D2</strong> Justify a performance profiling system to support the identified requirements of a selected sport</td>
</tr>
<tr>
<td><strong>P4</strong> Create a performance profiling system to demonstrate the importance of the requirements and how they relate</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Analyse the sports performance of individuals</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Plan the analysis of a performer in a selected sport.</td>
<td><strong>M3</strong> Demonstrate valid and reliable analysis methods to capture the analysis of a performer in a selected sport</td>
<td><strong>D3</strong> Critically analyse the performance of a performer in a selected sport by collecting varied and detailed analysis evidence</td>
</tr>
<tr>
<td><strong>P6</strong> Analyse the performance of a performer in a selected sport</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Carry out a post-event analysis to provide feedback to aid the development of sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Interpret the analysis of a sports performer to provide feedback.</td>
<td><strong>M4</strong> Evaluate the analysis of a sports performer to provide feedback and recommendations to improve future performance</td>
<td><strong>D4</strong> Critically evaluate the analysis of a sports performer to provide detailed feedback and recommendations that are justified</td>
</tr>
<tr>
<td><strong>P8</strong> Produce a post-event analysis feedback report to aid the development of sports performance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Links
This unit links to the following related units:

*Unit 13: Technology in Sport*
*Unit 33: Physical Literacy*
*Unit 34: Advanced Coaching*
*Unit 38: Exercise Physiology*
Unit 17: Talent Identification & Development

<table>
<thead>
<tr>
<th>Unit code</th>
<th>J/616/1690</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

There is a worldwide industry in talent identification and development, and many people are employed in finding gifted individuals and developing the talent they possess. Talent identification is big business, from sports through to art and education; researchers in all domains are attempting to find a way to identify the best in their field. However, finding the most effective and efficient talent identification method is a complex and ever-changing task, in particular within the sport industry.

This unit starts with exploring the aim, structure and purpose of talent identification and development within sport. In doing so, the Learning Outcome aims to justify the effectiveness of talent identification and development, and the need for it in elite sport. The second Learning Outcome focuses on the key predictors used in sport identification and the key factors within talent development, in particular the impact of technology.

The unit then requires students to review talent identification and development programmes of their choice, analysing the strengths and weaknesses of the programme with regard to aim, predictors used, structure, monitoring techniques and technology used. From reviewing talent identification and development programmes, students will be in a position to plan a sports identification and development programme for a sport of their choice. The plan will have to include aims, scale of the programme, justification of predictors, tests used and structure of programme.

On completion of this unit, students will not only have knowledge and understanding of talent identification and development in sport, but will have the capability to review the effectiveness of talent identification and development programmes, and identify factors that impact on success. The skill of reviewing and analysing processes and policies within sport is a much sought-after skill in the sporting industry. Likewise, is the ability to coherently plan, especially when planning a talent identification and development programme, which this unit will also provide experience in. Planning is imperative in all aspects of sport, from coaching and teaching to policy making and running an event.
Learning Outcomes

By the end of this unit students will be able to:
1. Explore the aim, structure and purpose of talent identification and development
2. Discuss key predictors and factors in talent identification and development
3. Review talent identification and development programmes in a chosen sport
4. Plan a talent identification and development programme for a chosen sport.
Essential content

LO1 Explore the aim, structure and purpose of talent identification and development

Types of talent:
Uni-dimensional talent
Multi-dimensional talent
Uni-sport talent
Multisport talent

Aim and purpose:
Talent identification: identify ability and potential
Nature: muscle fibres, height, body type
Talent development: develop talent
Nurture: experiences, high-quality coaching
Justification of talent ID and development programmes

Structure:
Scale of programme: catchment area, age range
Format
Phases and stages
Timescale
Target and goal setting
Criteria
LO2 **Discuss key predictors and factors in talent identification and development**

*Key predictors:*
Natural selection
Scientific selection
Physical (anthropometric): height, weight, muscle girth, somatotype, muscle fibre type
Physiological: aerobic endurance, anaerobic power, agility, flexibility
Sociological: parental support, practice opportunities, education, socio-economic class, peers
Psychological: confidence, concentration, anticipation, decision-making, game intelligence
Skills: general motor skills, technical and tactical skills

*Key factors:*
Technology: analysis, testing, GPS
Injuries
Pressure
Specific requirements of different genders and different age groups
Sport and position specific
LTAD
Tests used: suitability, reliability, validity

LO3 **Review talent identification and development programmes in a chosen sport**

*Talent identification programmes:*
Discover your Gold
Girls4Gold
Start programme
Talent ID programmes internationally: Canada, Australia, USA, China
Talent ID sport-specific programmes: rugby, football, netball, rowing, waterskiing, basketball
Talent development programmes:
Performance Pathway
World Class Podium Potential
TASS (Talented Athlete Sponsorship Scheme)
LTAD (Long Term Athlete Development)
Talent Development Programme within the England Talent Pathway
Talent Development Programmes internationally: Canada, Australia, USA, NZ, China
Talent Development Programmes, sport-specific: rugby, football, netball, rowing, waterskiing, basketball

Review:
Aims
Monitoring techniques
Barriers
Success
Predictors used (suitability to the sport)
Tests used (suitability to the sport)

LO4 Plan a talent identification and development programme for a chosen sport

Planning requirements:
Aims and objectives
Stages and phases
Natural and/or scientific selection
Criteria required for selection: physiological test scores, physical characteristics
Scope of programme
Timescale
Funding
Key predictors: speed, arm length, body type
Justification of key predictors: specific to chosen sport and position
Suitability for age and gender
Organisations involved: NGBs, support systems, clubs, governments
Monitoring techniques
Use of technology
Sport requirements
Tests used: agility test, one-rep max
Resources required
Position specific
End outcome

Future suggestions:
Further use of analysis and technology
Cross-sport talent ID: multi-dimensional talent ID
A generic model for talent ID and development: not sport specific (only late into the development stage the athlete determines which sport he/she is best suited to)
Reconsider age brackets of talent ID programmes
More talent ID and development programmes for sport coaches
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explore the aim, structure and purpose of talent identification and development</td>
<td><strong>P1</strong> Explore the aim and purpose of talent identification and development programmes</td>
<td><strong>M1</strong> Differentiate aims, purpose and structure of talent identification programmes to talent development programmes</td>
</tr>
<tr>
<td><strong>P2</strong> Assess the structure of talent identification and development programmes</td>
<td><strong>M2</strong> Compare the effectiveness of natural and scientific selection within talent identification programmes</td>
<td><strong>M3</strong> Evaluate the impact of key factors on talent development programmes</td>
</tr>
<tr>
<td><strong>LO2</strong> Discuss key predictors and factors in talent identification and development</td>
<td><strong>P3</strong> Discuss key predictors in talent identification.</td>
<td><strong>P4</strong> Investigate key factors within talent development</td>
</tr>
<tr>
<td><strong>P4</strong> Investigate key factors within talent development</td>
<td><strong>M2</strong> Compare the effectiveness of natural and scientific selection within talent identification programmes</td>
<td><strong>M3</strong> Evaluate the impact of key factors on talent development programmes</td>
</tr>
<tr>
<td><strong>LO3</strong> Review talent identification and development programmes in a chosen sport</td>
<td><strong>P5</strong> Review a talent identification programme within sport</td>
<td><strong>M4</strong> Examine the suitability of the key predictors used in the talent identification programme</td>
</tr>
<tr>
<td><strong>P6</strong> Review a talent development programme within sport</td>
<td><strong>M4</strong> Examine the suitability of the key predictors used in the talent identification programme</td>
<td><strong>M5</strong> Assess the suitability of tests, criteria and stages used in the talent development programme</td>
</tr>
<tr>
<td><strong>LO4</strong> Plan a talent identification and development programme for a chosen</td>
<td><strong>P7</strong> Plan a talent identification programme for a chosen sport</td>
<td><strong>M6</strong> Justify the plan of the talent identification and development programme in reference to age, gender, sport and position</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Journals
Journal of Sport Sciences

Websites
www.uksport.gov.uk/our-work/talent-id
UK Sport
Our work – Talent ID
General reference

www.eis2win.co.uk
EIS
Performance Pathways
General reference

Links
This unit links to the following related units:
Unit 9: Biomechanics
Unit 10: Technology in Sport
Unit 18: Exercise Prescription

<table>
<thead>
<tr>
<th>Unit code</th>
<th>L/616/1691</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Exercise prescription is the use of specific planned activities that are developed to improve a client’s or patient’s health or fitness levels. Moreover, these specific health- or fitness-related plans are designed by rehabilitation or fitness specialists.

The aim of this unit is to provide students with an insight into the fitness and rehabilitation sector. This unit delivers both the theoretical and practical knowledge that is required for students to progress into the fitness or exercise rehabilitation industry. The purpose of the unit is for students to enhance their knowledge of the different types of clients that require exercise prescription and to gain the skills to provide an exercise programme. Throughout this unit, students will further their health screening knowledge, including the practical implementation of these tests during a lifestyle consultation. Moreover, students will gain knowledge of effective questioning and linking a client’s needs to a specific exercise programme.

Furthermore, the unit provides students with the opportunity to create and implement an exercise programme to meet a specific client’s requirements. This encourages students to simulate the role of a rehabilitation or fitness specialist when dealing with a client. Students will also research and implement their theoretical knowledge in a practical exercise environment. Additionally, they will utilise client feedback to provide a critical evaluation of the designed exercise programme and suggest improvements.

On completion of this unit, students will be able to demonstrate knowledge of effective health screening and the different forms of exercise relevant to specific clients. Moreover, the students will be able to produce a lifestyle consultation and relevant health screening, thus leading to the design and delivery of an exercise programme.
Learning Outcomes

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

1. Assess appropriate forms of exercise for different client groups
2. Investigate appropriate health screening tests for different client groups
3. Undertake consultation and appropriate health screening tests for a client from a specific client group
4. Design an exercise programme for a client from a specific client group.
Essential content

LO1 **Assess appropriate forms of exercise for different client groups**

*Forms of physical activity:*
Lifestyle adaptations to increase activity levels, e.g. gardening, shopping, walks, commute

*Forms of exercise:*
Gym-based, e.g. cardiovascular machines, resistance machines, free weights, flexibility
Group exercises, e.g. CrossFit, boot camp, circuits, yoga, indoor cycling, Zumba
Water exercises, e.g. aqua aerobics, hydrotherapy, swimming and chair-based exercises

*Functional training:*
Lifestyle movement patterns, e.g. strengthening for everyday activities, reducing compensation patterns, core stability

*Referred clients:*
Obesity, osteoarthritis, diabetes, osteoporosis, mental health issues

*At-risk client groups:*
Sedentary people, older adults, people with additions, people with disabilities

LO2 **Investigate appropriate health screening tests for different client groups**

*Health screening tests:*
Body mass index, blood pressure, sit and reach, skinfold measurements, bioelectrical impedance, sub-maximal test of aerobic endurance and one-rep max test

*Understanding of blood testing:*
Blood lipid profile, blood cholesterol tests, blood glucose tests, electrolyte test, and review of other potential results gained from blood tests

*Categorising clients:*
Risk stratification (A, B, C), referral process
Recording information:
Data protection, clinical reasoning, reports for GP, normative data, identifying client’s needs

Functional screening:
Flexibility, movement patterns, joint mobility, and core activation

LO3 Undertake consultation and appropriate health screening tests for a client from a specific client group

Lifestyle consultation:
Utilisation of different types of questioning appropriate to the client, diet, activity levels, smoking, alcohol
Choose and utilise a current and effective questionnaire, personal details, medication, family medical history, occupation, contraindications, and referral process
Undertake the consultation, appropriate communication, collection of information, building of rapport
Undertake health screening tests appropriate for the client, body mass index, blood pressure, sit and reach, skinfold measurements, bioelectrical impedance, sub-maximal test of aerobic endurance
Compare the client’s results to normative data, record any anomalies

LO4 Design an exercise programme for a client from a specific client group

Design a physical activity or exercise programme based on the client screened in the consultation:
Principles of training, specificity, overload, progression, reversibility, tedium, FITT (frequency, intensity, time, type). ACSM guidelines

Carry out a session from the designed programme:
Warm up, activity, cool down

Monitor client:
Perceived exertion, observation, and talk test, heart rates, and percentages of repetition max

Evaluate programme:
Gain client feedback, strengths and areas to improve, benefits of the programme
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Assess appropriate forms of exercise for different client groups</td>
<td><strong>P1</strong> Investigate different client groups that require prescribed exercise</td>
<td><strong>D1</strong> Analyse how client groups could progress through different forms of exercise.</td>
</tr>
<tr>
<td><strong>P2</strong> Illustrate appropriate forms of exercise for different client groups</td>
<td><strong>M1</strong> Compare different forms of exercise for different client groups</td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Investigate different client groups that require prescribed exercise</td>
<td><strong>M2</strong> Evaluate the benefits of appropriate forms of exercise for different client groups</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Illustrate appropriate forms of exercise for different client groups</td>
<td><strong>M3</strong> Compare different forms of exercise for different client groups</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Assess the categorising of clients and collating of information</td>
<td><strong>M4</strong> Evaluate the benefits of appropriate forms of exercise for different client groups</td>
<td></td>
</tr>
<tr>
<td><strong>M6</strong> Illustrate appropriate health screening tests for different client groups</td>
<td><strong>M5</strong> Explore any anomalies found in the specific client's health screening test results</td>
<td></td>
</tr>
<tr>
<td><strong>M7</strong> Analyse the interrelationship between different health screening tests</td>
<td><strong>M8</strong> Critically evaluate the effectiveness of the exercise programme based on client feedback</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Investigate appropriate health screening tests for different client groups</td>
<td><strong>M9</strong> Analyse the impact that appropriate health screening can have on different client groups</td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Illustrate appropriate health screening tests for different client groups</td>
<td><strong>M10</strong> Analyse the interrelationship between different health screening tests</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Assess the categorising of clients and collating of information</td>
<td><strong>M11</strong> Explore any anomalies found in the specific client's health screening test results</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Carry out a lifestyle consultation with a client from a specific group</td>
<td><strong>M12</strong> Demonstrate effective and progressive use of questioning throughout the consultation with a specific client</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Demonstrate effective health screening appropriate for a specific client</td>
<td><strong>M13</strong> Demonstrate effective and progressive use of questioning throughout the consultation with a specific client</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Undertake consultation and appropriate health screening tests for a client from a specific client group</td>
<td><strong>M14</strong> Explore any anomalies found in the specific client's health screening test results</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Carry out a lifestyle consultation with a client from a specific group</td>
<td><strong>M15</strong> Demonstrate effective and progressive use of questioning throughout the consultation with a specific client</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Demonstrate effective health screening appropriate for a specific client</td>
<td><strong>M16</strong> Demonstrate effective and progressive use of questioning throughout the consultation with a specific client</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Design an exercise programme for a client from a specific client group</td>
<td><strong>P7</strong> Compose an exercise programme for a client from a specific client group</td>
<td></td>
</tr>
<tr>
<td><strong>P8</strong> Demonstrate the use of different forms of exercise through the exercise programme for a client from a specific client group</td>
<td><strong>M6</strong> Apply effective monitoring of intensity to ensure safe and effective exercise</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>M7</strong> Interpret the feedback provided by the client on the exercise programme</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.exrx.net Exercise & Muscle Directory
Directory
Research

www.prescription4exercise.com Prescription for Exercise
P4E Stay Active
General Reference

Links
This unit links to the following related units:
Unit 6: Training, Fitness, Testing
Unit 7: Physical Activity, Lifestyle & Health
Unit 8: Lifestyle Coaching
Unit 21: Sport & Exercise for Specific Groups
Unit 30: Entrepreneurism in Sport
Unit 33: Strength & Conditioning for Coaching.
Unit 19: Contemporary Issues in Health

<table>
<thead>
<tr>
<th>Unit code</th>
<th>R/616/1692</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

The health of the nation is a government priority which has grown in recent years. Increases in the rates of a variety of medical conditions has highlighted that more needs to be done to support healthy lifestyles. Knowledge of the issues which surround this topic is vital for anyone interested in working in the sport or leisure industry.

This unit will allow students to understand which groups may be more at risk of health problems, as well as identifying which issues are of most concern to governments, local governments and health professionals. This will enable students to develop professional practice to support those most in need in their local area, as well as to develop understanding as to how and why these issues are important.

Students will develop skills, including the analysis and evaluation of initiatives and programmes for improving the health of the nation as well as investigative skills to identify key factors which affect specific local populations and their access to, and engagement with, schemes to improve health.

On successful completion of this unit, students will be able to show their knowledge of a range of health issues which affect different communities and adapt professional practice to ensure that all groups, and specifically those at risk, are catered for in physical activity programmes, both government-led and those provided by the private sector.
Learning Outcomes

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

1. Investigate health issues which affect contemporary society
2. Communicate why health is a priority for change
3. Evaluate the contribution of Physical Education in schools to the health of young people
4. Discuss government and private initiatives aimed at improving the health of the nation.
Essential content

LO1 **Investigate health issues which affect contemporary society**

*Obesity:*
Causes – diet, inactivity, socio-economic status, technology
Related diseases – Type 2 diabetes, stroke, CV disease, mental health issues etc.

*Mental health issues:*
E.g. depression, eating disorders, anxiety disorders etc.
Causes – technology, media, change in family lives, academic pressure, diet and exercise habits
Consider how these conditions are interrelated and which conditions may be more prevalent in the local community

LO2 **Communicate why health is a priority for change**

*Economic effects of poor health:*
Health service pressure
Work productivity
Government financial support

*Groups most at risk of specific health conditions:*
E.g. specific cultural groups
Gender/age
Lower income families

LO3 **Evaluate the contribution of Physical Education in schools to the health of young people**

*Primary schools:*
National curriculum
Facilities
Teachers and coaches
Nutrition and the Healthy Schools programme
Secondary schools:
National Curriculum and qualifications
Facilities
Curriculum
Nutrition education
Consideration and support for mental and social health
Emotional intelligence

LO4 Discuss government and private initiatives aimed at improving the health of the nation.

Government initiatives, e.g:
Daily Mile
Change 4 Life
School Sports Premium
Cycle to Work Scheme

Tutor should provide more examples of contemporary government (including local government) initiatives pertinent to the issues present in the local community

Private initiatives, e.g:
Parkrun
Fitness trackers and apps
Obstacle courses and events
Local government events
This Girl Can

Tutor should provide more examples of contemporary private initiatives pertinent to the issues present in the local community
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1 Investigate health issues which affect contemporary society</strong></td>
<td><strong>P1 Outline health issues which affect contemporary society</strong></td>
<td><strong>D1 Analyse the reasons why these health issues are more problematic today</strong></td>
</tr>
<tr>
<td><strong>M1 Discuss why specific groups may be more at risk of certain health issues than others</strong></td>
<td><strong>D2 Assess the effect of a health issue on a given population</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LO2 Communicate why health is a priority for change</strong></td>
<td><strong>P2 Discuss how health can affect an individual’s social life</strong></td>
<td><strong>D3 Analyse the effects of Physical Education and schools on an individual’s health</strong></td>
</tr>
<tr>
<td><strong>M2 Evaluate how national health issues impact upon government priorities</strong></td>
<td><strong>D4 Assess the suitability of initiatives in improving the health of the nation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LO3 Evaluate the contribution of Physical Education in schools to the health of young people</strong></td>
<td><strong>P4 Evaluate the contribution of Physical Education to a child’s health</strong></td>
<td><strong>M4 Evaluate the effectiveness of government and private initiatives in improving health</strong></td>
</tr>
<tr>
<td><strong>M3 Explore, using case studies as examples, Physical Education’s contribution to the health of young people</strong></td>
<td><strong>D5 Assess the suitability of initiatives in improving the health of the nation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>LO4 Discuss government and private initiatives aimed at improving the health of the nation.</strong></td>
<td><strong>P5 Outline a range of government initiatives aimed at improving health</strong></td>
<td><strong>M5 Evaluate the suitability of initiatives in improving the health of the nation</strong></td>
</tr>
<tr>
<td><strong>P6 Discuss how private initiatives differ from government schemes</strong></td>
<td><strong>D6 Assess the suitability of initiatives in improving the health of the nation</strong></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.gov.uk/government/organisations/department-of-health Department of Health
Public Health
Research
www.local.gov.uk/topics/social-care-health-and-integration Local Government
Social care, Health and Integration
Research
www.shiftn.com/obesity/Full-Map.html Shift
Obesity system influence diagram
Information

Links
This unit links to the following related units:
Unit 1: Nutrition
Unit 7: Physical Activity, Lifestyle & Health
Unit 12: Community Coaching
Unit 20: Health Community Engagement
Unit 21: Sport & Exercise for Specific Groups
Unit 22: Physical Education & School Sport
Unit 29: Teaching Practice.
Unit 20: Health Community Engagement

<table>
<thead>
<tr>
<th>Unit code</th>
<th>Y/616/1693</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Public health issues of the 21st century include chronic diseases such as cancer, coronary heart disease, diabetes and mental health illnesses such as anxiety and depression which can arise due to obesity and physical inactivity. These problems are influenced by the social, physical and economic environments in which people live. To address these complex health issues successfully, national and local health departments must broaden their approaches and use a range of strategies to promote community health. Authoritative public health organisations such as the World Health Organisation (WHO) recognise the importance of including community engagement into this range of strategies, which should aim to inform, educate and empower people about health issues and the benefits of engaging in a healthier and more active lifestyle.

Health community engagement is, therefore, essential for improving quality of life and to ensure that everyone, regardless of their age, gender or background, feels able to engage in sport and physical activity on a regular and meaningful basis. The purpose of this engagement is not only to enhance the physical and mental wellbeing of individuals within a community, but also for the social and economic development of society.

By engaging with communities directly, sport and physical activity will develop as a way of life and have a positive impact on individuals and their communities. Health community engagement is essential to increase levels of physical activity within sections of society which engage less than the recommended amount. The underlying purpose is, therefore, to increase the number of people who engage in sport and physical activity, not for its own sake but for the wider benefits that it can bring.

Students will develop skills such as communication, interpretation and critical analysis through the completion of this unit, which are crucial for gaining employment within the sport and fitness industry and developing academic competence.
Learning Outcomes

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

1. Assess the health issues associated with different target groups
2. Examine the effectiveness of local and national health initiatives and their effect on the population
3. Plan health community engagement programmes for different target groups
4. Implement health community engagement programmes for different target groups.
Essential content

LO1 Assess the health issues associated with different target groups

Target groups:
E.g. women, young people, 50+, disabled people, minority groups

Health issues:
Physical, e.g. obesity, coronary heart disease, osteoporosis, diabetes
Psychological, e.g. negative psychological wellbeing, e.g. stress, anxiety, depression, low self-confidence, poor self-esteem, negative self-concept, addiction, low emotional intelligence
Trends (local, national and international)
Impact of poor nutrition and physical inactivity
Use of relevant national and international guidelines for good nutrition and physical activity levels, e.g. American College of Sports Medicine (ACSM) guidelines, Eatwell Plate
Factors influencing health, e.g. gender, age, socioeconomic status, ethnic background, poverty, behaviour patterns, lifestyle, genetics, disability, environmental issues, geographical location

LO2 Examine the effectiveness of local and national health initiatives and their effect on the population

Health initiatives and campaigns:
Focus of health initiatives, e.g. health education, health protection, disease prevention, curative strategies and health gains
National initiatives, e.g. health at work (BHF), Q Initiative (The Health Foundation), Healthy Start (NHS), Walking for Health, National Diabetes Initiative (NHS); Health, Exercise and Nutrition for the Really Young (Henry)
International initiatives, e.g. Global Health Initiative, Healthy People 2020 (USA, Office of Disease Prevention and Health Promotion)
National campaigns, e.g. National Obesity Awareness Week, Nutrition and Hydration Week, On Your Feet Britain, BNF Healthy Eating Week
International campaigns, e.g. World Health Day (WHO), World No Tobacco Day, World Cancer Day
Organisations involved in developing health initiatives and campaigns:

Organisations, e.g. World Health Organisation (WHO), national and local government, local authorities, primary care trusts, private sector organisations, professional associations, community and voluntary groups, educational establishments, employers, Sport England, county sport partnerships

Role of organisations in the development of health initiatives and campaigns

Policy:

Local, national and international policy, e.g. Government White Papers, Sport Action Zones, International Health Policy Centre (The Commonwealth Fund), Health Action Zones

LO3 Plan community engagement programmes for different target groups

Health issues:

Physical, e.g. obesity, coronary heart disease, diabetes, cancer

Psychological, e.g. stress, anxiety, depression, addiction

Aims and objectives:

e.g. relevant to target group, location and health need.

Plan and develop:

Target group, e.g. women, young people, 50+, disabled people, ethnic minorities

Plan – data gathering and research, needs assessment and priorities, aims and objectives, consultation, establishing partnerships, contingencies

Activities, e.g. workshops, exercise classes, discussions, volunteering

Materials, e.g. handouts, equipment, policies, catering

Resources, e.g. venue, finance, staff, equipment

Staff, e.g. fitness instructor, personal trainer, nurse, physiotherapist, counsellors

Sources of funding, e.g. fundraising, employer, local authority, grants

Marketing and promotion, e.g. posters, presentations, local media (radio and newspaper), leaflets
LO4 Implement health community engagement programmes for different target groups

*Implementation:*
Implementation, e.g. following guidelines (health and safety, equal opportunities), working in teams, problem-solving, communication

*Review of a training programme:*
Effectiveness – strengths, areas for improvement, recommendations for future development, links to aims and objectives and needs assessment

Monitoring and evaluation of effectiveness, e.g. questionnaires, focus groups, interviews, observation, peer assessment
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Assess the health issues associated with different target groups</td>
<td><strong>M1</strong> Compare and contrast the health issues associated with target groups in a specific location</td>
<td><strong>D1</strong> Critically evaluate the impact of poor nutrition and physical inactivity on the health issues associated with target groups in a specific location</td>
</tr>
<tr>
<td><strong>P1</strong> Assess the health issues associated with target groups in a specific location</td>
<td><strong>P2</strong> Review local and national trends in obesity and physical inactivity for target groups</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Examine the effectiveness of local and national health initiatives and their effect on the population</td>
<td><strong>P3</strong> Assess local and national health campaigns and initiatives designed to improve the health of a specific target group</td>
<td><strong>D2</strong> Critically analyse the effectiveness of local and national health campaigns and initiatives in developing the health of a specific target group and their impact on society</td>
</tr>
<tr>
<td><strong>P4</strong> Review local and national trends in obesity and physical inactivity for target groups</td>
<td><strong>M2</strong> Justify the use of local and national health campaigns and initiatives in developing the health of a specific target group</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Plan community engagement programmes for different target groups</td>
<td><strong>P5</strong> Complete a needs assessment, identifying the health development priorities for a specific target group</td>
<td><strong>D3</strong> Critically evaluate how the design of a community engagement programme will meet the health needs of a specific target group</td>
</tr>
<tr>
<td><strong>P6</strong> Develop a community engagement programme for a specific target group</td>
<td><strong>M3</strong> Justify the design of a community engagement programme for a specific target group</td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>Merit</td>
<td>Distinction</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>LO4</strong> Implement health community engagement programmes for different target groups</td>
<td><strong>P7</strong> Conduct a health community engagement programme for a specific target group</td>
<td><strong>D4</strong> Critically analyse recommendations for development in relation to the health needs of a specific target group</td>
</tr>
<tr>
<td><strong>P8</strong> Review the effectiveness of a health community engagement programme for a specific target group, identifying strengths and areas for improvement</td>
<td><strong>M4</strong> Justify the strengths and areas for improvement of a health community engagement programme making recommendations for development</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.acsm.org American College of Sports Medicine
www.doh.gov.uk Department of Health
www.communityplanningtoolkit.org Community engagement planning
www.nhs.uk Physical and Psychological illness, signs, symptoms and treatment
www.nutrition.org.uk British Nutrition Foundation
www.sportengland.org Sport England
www.who.int World Health Organisation
Links

This unit links to the following related units:

Unit 1: Nutrition
Unit 2: Fundamentals of Sport & Exercise Psychology
Unit 6: Training, Fitness, Testing
Unit 7: Physical Activity Lifestyle and Health
Unit 8: Lifestyle Coaching
Unit 12: Community Coaching
Unit 19: Contemporary Issues in Health
Unit 36: Applied Lifestyle Coaching.
Unit 21: Sport & Exercise for Specific Groups

<table>
<thead>
<tr>
<th>Unit code</th>
<th>D/616/1694</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Sports and exercise are increasing in importance for a range of specific groups that require health improvement, maintenance or the management of conditions. Furthermore, sport and exercise provides the opportunity for the development of new skills, enhancing a client's potential performance levels.

The aim of this unit is to provide students with an insight into the growing sector of exercise referral and sports for all. This unit delivers both the theoretical and practical knowledge that is required for students to progress into a profession of exercise referral or sports development. Students will be able to enhance their knowledge of the benefits of sport and exercise while gaining the skills to provide safe and effective sport and/or exercise sessions. Throughout this unit, students will further their knowledge of specific client groups that require sport and exercise as a form of rehabilitation or maintenance. Furthermore, the students will gain knowledge of current practices and initiatives that are producing sport and exercise while investigating the barriers to participation.

This unit will provide students with the opportunity to research and implement theoretical knowledge in a practical sport and exercise environment. Additionally, practical application will encourage students to create a sustainable structure that could be implemented nationwide, thus leading into the sports development and health promotion industry.

On completion of this unit, students will be able to demonstrate knowledge of the different specific client groups and the barriers to their involvement in sport and exercise. Moreover, students will be able to produce both a sport and an exercise session that will encourage participation.
Learning Outcomes

By the end of this unit students will be able to:
1. Explore the benefits of sport and exercise for specific groups
2. Investigate the barriers preventing specific groups from performing exercise
3. Design a sporting activity or exercise session for specific groups
4. Demonstrate the sporting activity or exercise session for specific groups.
Essential content

**LO1 Explore the benefits of sport and exercise for specific groups**

*Specific groups:*
Young people, referred clients, older adults, ante- and post-natal, people with disabilities and people with additions

*Psychological benefits:*
Increased feeling of energy, social cohesion, reduced stress and mood swings, improved confidence levels, improved self-esteem and accomplishment, increased emotional intelligence

*Physiological benefits:*
Reduced health risks, e.g. diabetes, improved biomechanical function, increased cardiovascular function, motor skill development, strengthening of musculoskeletal system, improved neuron response and weight control

*Sporting activities:*
Walking football, seated volleyball, adapted sports, parasport

*Exercise:*
Cardio training, resistance training, flexibility sessions, classes, water-based sessions and functional training, e.g. general life movements, sporting movements

**LO2 Investigate the barriers preventing specific groups from performing exercise**

*Psychological barriers:*
Low confidence levels, lack of social support, previous experiences and lack of understanding of the benefits

*Barriers:*
Time, money, childcare, physical ability level, access to facilities and knowledge of where to go
Solutions:
Council leisure passes, crèche facilities, advertisement of initiatives, peer training sessions, community engagement, education of individuals and adaptation of sport and exercise

Initiatives:
Change for Life, StreetGames, Transtheoretical Model of Behaviour Change through Sport England, National Health Service, Walking Football United, parasport and exercise referral schemes

LO3 Design a sporting activity or exercise session for specific groups

Considerations:
Specific adaptions to chosen sports, equipment required, officiating, rule changes, effects of competition, creating a group environment, building confidence and education of clients.

Exercise considerations:
Health and condition of the client, ability of the client, contingency planning, equipment available, creating a group environment, building confidence and education of clients.

Structure:
Effective warm-up and cool-down, main session, including teaching or coaching to improve client's ability/skill level

Aims of the sessions:
Monitor progression of the session, and/or the client's health/condition, improvement of the client's skill level

LO4 Demonstrate the sporting activity or exercise session for specific groups

Carry out, effective sessions:
Warm-up, cool-down and main sessions for both a sporting activity and exercise session, ensuring they are relevant for two different specific groups

Feedback:
Provide feedback throughout the sessions, educate the clients towards self-sufficiency, gain feedback from the clients and compare
Comparison of the two sessions:
Strengths and areas to improve, structure of sessions, client perception, adaptations applied, progression within the sessions, meeting the aims and objectives

Evaluation:
How could the structure be implemented in different places? How can the session become an initiative? Simple structure that can be mirrored, work-based sessions, community-based sessions, school-based sessions, clear aims and objectives
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explore the benefits of sport and exercise for specific groups</td>
<td><strong>P1</strong> Investigate the benefits of sport and exercise for specific groups</td>
<td><strong>D1</strong> Evaluate the effectiveness of specific sport and exercise activities that benefit specific groups</td>
</tr>
<tr>
<td><strong>P2</strong> Suggest sport and exercise activities that would benefit specific groups</td>
<td><strong>M1</strong> Analyse the benefits of sport and exercise for specific client groups</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Investigate the barriers preventing specific groups from performing exercise</td>
<td><strong>P3</strong> Assess the barriers that are preventing specific groups performing sport and/or exercise</td>
<td><strong>D2</strong> Compare the sport and exercise initiatives that are currently reducing the participation barriers</td>
</tr>
<tr>
<td><strong>P4</strong> Communicate the sport and exercise initiatives that are reducing the participation barriers</td>
<td><strong>M2</strong> Justify the solutions that are in place to combat the participation barriers</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Design a sporting activity or exercise session for specific groups</td>
<td><strong>P5</strong> Design a sporting activity or exercise session for specific groups</td>
<td><strong>D3</strong> Discuss the adaptations and progressions that could be made to make the sporting activity or exercise session effective for a specific group</td>
</tr>
<tr>
<td><strong>P6</strong> Justify the choices for the sporting activity or exercise session for specific groups</td>
<td><strong>M3</strong> Differentiate the aims of the sporting activity or exercise session for specific groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>M4</strong> Develop an effective sporting activity or exercise session to combat the barriers that prevent the specific groups from participating</td>
<td></td>
</tr>
<tr>
<td>Pass</td>
<td>Merit</td>
<td>Distinction</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>LO4</strong> Demonstrate the sporting activity or exercise session for specific groups</td>
<td><strong>P7</strong> Carry out the planned sporting activity or exercise session for specific groups  <strong>P8</strong> Demonstrate the ability to provide feedback during the session to ensure safety of participants</td>
<td><strong>D4</strong> Suggest how the sessions could be progressed to move towards a sustainable structure  <strong>M5</strong> Apply relevant feedback as to how participants could become self-sufficient with the session or activity</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.nhs.uk NHS Choices
Health and Fitness
General Reference

www.sportengland.org Sport England
Our Work
General Reference

Links
This unit links to the following related units:

Unit 6: Training, Fitness, Testing
Unit 7: Physical Activity, Lifestyle and Health
Unit 9: Biomechanics
Unit 18: Exercise Prescription
Unit 19: Contemporary Issues in Health
Unit 33: Strength & Conditioning for Coaching.
Unit 22: Physical Education & School Sport

<table>
<thead>
<tr>
<th>Unit code</th>
<th>H/616/1695</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Physical Education and school sport are important parts of any school curriculum and allow children to develop skills, knowledge and attributes for lifelong learning, physical activity and health. They offer young people the chance to be active, competitive, talented performers who will take activity and sport into their later lives.

Merging theory with practice, this unit explores key issues and concerns that impact upon the teaching and learning process in Physical Education and school sport. This unit is designed to raise levels of subject knowledge, understanding, confidence and personal performance in the teaching and coaching of physical education. It will also explore the role and purpose of sport in schools.

Applying theoretical understanding to safe practice in Physical Education and school sport, this module examines the key factors that frame, and constrain, the growing child's capacity to learn in the practical domain. Students will develop the ability to plan for and deliver clearly structured learning experiences and evaluate the effectiveness of these.

This unit develops students' subject, curriculum and pedagogical content knowledge in the context of Physical Education and school sport. It introduces students to the safe and effective teaching of Physical Education and school sport in both the school and wider community environment and is suitable to those students interested in teaching or coaching careers.
Learning Outcomes

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

1. Examine the expectations, principles and practice of Physical Education curriculums and school sport
2. Review the role of Physical Education and school sport in contributing to the growing child
3. Plan a practical activity for a selected age group
4. Evaluate a practical activity for a selected age group.
Essential content

LO1 Examine the expectations, principles and practice of Physical Education curriculums and school sport

Expectations of Physical Education and school sport:
Definitions of physical activity, Physical Education and school sport
Content and purpose of study of Physical Education curriculums
Activity level recommendations for the developing child and age appropriateness of activity
Current guidelines, policies and recommendations for Physical Education and School Sport, e.g. funding and reporting
Quality assurance bodies, e.g. government and NGBs and the influence of government ideology on the teaching of PE and school sport
Healthy active lifestyles

Principles and practice in Physical Education and school sport:
Activities areas in the curriculum and how these develop through the age ranges, e.g. 0-5 year-olds
Role of the government in promoting and supporting school sport
Inclusive practices in physical education and school sport
Talent development
Teaching methods and approaches and how these differ with context, people and intended learning
Physical Education pedagogy and exploring a range of ways of teaching and coaching young people
LO2 Review the role of Physical Education and school sport in contributing to the growing child

_The role of physical development and physical activity in developing motor skills:_

Child development

Cognitive domain – problem-solving, tactics and strategy

Psychomotor domain – motor skill acquisition, physical literacy, spatial awareness

Social and affective domain – social and mental health, empathy, tolerance, respect, building positive relationships, fostering risk-taking behaviours, positive self-concept, emotional intelligence

Health- and skill-related fitness – contribution to a healthy active lifestyle, the differences between health-related fitness and skill-related fitness

LO3 Plan a practical activity for a selected age group

_Exploring a range of ways of teaching and coaching practical activities using recommended good practice:_

Behaviour for learning – consideration of effective strategies and appropriate planning, with levelled challenge for students. Adaption of teaching/coaching styles to counteract disruptive behaviour

Inclusive practices and differentiating for a range of students, e.g. those with SEND and gifted and talented children with appreciation of the cognitive, social, affective and psychomotor domains

Modelling and questioning as a means to assess understanding and demonstrate accurate technique

Assessment for learning and exploring novel ways of monitoring progress and reporting to stakeholders, e.g. use of video technology, peer and self-assessment

Health and safety – expected practices to maintain a safe learning environment, e.g. the people involved, the equipment, the environment and the teaching approach
LO4 **Evaluate a practical activity for a selected age group**

- Teacher/coach behaviour and how this can influence learning and motivation
- Pupil learning and how this is affected by teacher’s/coach’s decision-making, provision and delivery
- Assessment of progress and the teacher’s/coach’s role in challenging and supporting children’s learning
- Health and safety principles applied in practice
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Examine the expectations, principles and practice of Physical Education curriculums and school sport</td>
<td><strong>P1</strong> Interpret the expectations, principles and practice of Physical Education curriculums</td>
<td><strong>D1</strong> Analyse the relationship between Physical Education and school sport and offer suggestions for good practice</td>
</tr>
<tr>
<td><strong>P2</strong> Present the expectations, principles and practice of school sport</td>
<td><strong>M1</strong> Review the relationship between Physical Education and school sport</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Review the role of Physical Education and school sport in contributing to the growing child</td>
<td><strong>P3</strong> Discuss the factors that contribute to healthy child development</td>
<td><strong>D2</strong> Critically analyse the relationship between child development, physical literacy and Physical Education and school sport</td>
</tr>
<tr>
<td><strong>P4</strong> Report the contribution that Physical Education and school sport can make to a growing child</td>
<td><strong>M2</strong> Evaluate the role that Physical Education and school sport can offer to the growing child</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Plan a practical activity for a selected age group</td>
<td><strong>P5</strong> Plan a practical activity for a selected age group</td>
<td><strong>D3</strong> Justify the design of a practical activity and use of Physical Education pedagogy</td>
</tr>
<tr>
<td><strong>P6</strong> Demonstrate, through planning, an awareness of Physical Education pedagogy</td>
<td><strong>M3</strong> Analyse the design of the practical activity with reference to inclusion, teaching strategies and health and safety</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Evaluate a practical activity for a selected age group</td>
<td><strong>P7</strong> Undertake the teaching of a physical activity session for a selected age group</td>
<td><strong>D4</strong> Critically analyse the recommendations made in relation Physical Education and school sport pedagogy</td>
</tr>
<tr>
<td><strong>P8</strong> Evaluate a physical activity session for a selected age group, identifying strengths and areas for improvement</td>
<td><strong>M4</strong> Justify the strengths and areas for improvement of a physical activity session for a selected age group, making recommendations for future development</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


**Websites**

<table>
<thead>
<tr>
<th>Website</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.afpe.org.uk">www.afpe.org.uk</a></td>
<td>The Association for Physical Education</td>
</tr>
<tr>
<td></td>
<td>National Curriculum</td>
</tr>
<tr>
<td></td>
<td>General reference</td>
</tr>
<tr>
<td><a href="http://www.sportengland.org">www.sportengland.org</a></td>
<td>Sport England</td>
</tr>
<tr>
<td></td>
<td>Our Work</td>
</tr>
<tr>
<td></td>
<td>General reference</td>
</tr>
<tr>
<td><a href="http://www.physical-literacy.org.uk">www.physical-literacy.org.uk</a></td>
<td>The Association for Physical Literacy</td>
</tr>
<tr>
<td></td>
<td>Resources</td>
</tr>
<tr>
<td></td>
<td>Research</td>
</tr>
<tr>
<td><a href="http://www.gov.uk/government/organisations/ofsted">www.gov.uk/government/organisations/ofsted</a></td>
<td>Ofsted</td>
</tr>
<tr>
<td></td>
<td>Physical Education</td>
</tr>
<tr>
<td></td>
<td>General reference</td>
</tr>
</tbody>
</table>

**Links**

This unit links to the following related units:

*Unit 7: Physical Activity, Lifestyle & Health*

*Unit 19: Contemporary Issues in Health.*
Unit 23: Physical Literacy

<table>
<thead>
<tr>
<th>Unit code</th>
<th>L/616/1058</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Physical literacy is increasingly influencing the development of coaching and physical education (PE) programmes that are gaining international resonance in a variety of physical activity settings. Within the last decade, the International Physical Literacy Association has been formed and has begun to influence policy, training and curriculum design across physical education and coaching, challenging the sector to consider the importance of enabling individuals to make positive decisions about physical activity across their life course.

This unit challenges students to explore and apply contemporary concepts and theories on the development of physical literacy across a variety of age groups and contexts, including children, young people and adult populations. The unit will enable students to understand the underpinning theories on contemporary movement concepts while applying these in a variety of practical settings. The unit will focus on a number of concepts inherent in the definitions of physical literacy that relate to the holistic development of young people through movement, leading to lifelong participation in physical activity and/or sport.

Students successfully completing the unit will be able to describe and apply theoretical concepts and frameworks such as monism and dualism, existentialism and Long Term Athlete Development (LTAD) in practical environments. Students will be challenged to plan, deliver and evaluate effective practical sessions designed to develop participants’ confidence, competence, knowledge and understanding in a variety of physical activity contexts.
Learning Outcomes

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

1. Analyse the constituent components that underpin the definition of physical literacy
2. Plan an effective coaching session, underpinned by relevant theoretical frameworks, aimed at developing physical literacy characteristics in a specific population
3. Deliver an effective practical coaching session addressing the physical literacy needs of a specific population
4. Discuss how the implementation of physical literacy could influence models of athlete development and physical education programmes.
Essential content

LO1 Analyse the constituent components that underpin the definition of physical literacy

*Focus upon multiple domains of learning:*
- Confidence, competence, knowledge and understanding
- Cognitive, affective, psychomotor
- Fundamental skills and fundamental sport skills

*The underpinning philosophical foundations of physical literacy:*
- Monism/dualism
- Existentialism
- Embodiment

*The focus upon life-course engagement with physical activity:*
- How confidence, competence, knowledge and understanding build foundations for choice about participation

LO2 Plan an effective coaching session, underpinned by relevant theoretical frameworks, aimed at developing physical literacy characteristics in a specific population

*Plan appropriate, effective sessions:*
- Safety
- Inspiring and engaging content
- Address multiple domains of learning

*Underpin planning with philosophical and pedagogical theory:*
- Contemporary learning theory
- Appropriate coaching style
- Understand how the environment created contributes to learning
Plan for specific needs of participant group:
Ages and stages of physical development
Relative age effect
Fundamental movement skills
Age-related expectations
Paediatric physiology
Recreational participants

LO3 Deliver an effective practical coaching session addressing the physical literacy needs of a specific population

Articulate clear aims and goals

Check safety and health implications of activity:
Injury status
Age- and ability-related appropriate activities
Safe equipment and space

Deliver effective content:
Appropriate activities adapted to the specific group
Show progression
Demonstrate differentiation
Clear communication

Develop physical literacy facets:
Confidence, competence, knowledge and understanding

Allow participant autonomy:
Negotiate goals, use of questioning, allow choice

Summarise learning:
Use of plenary strategies
Start and finish the session appropriately
Use warm-up and cool-down techniques/activities
LO4 Discuss how the implementation of physical literacy could influence models of athlete development and physical education programmes

Athlete development models:
Theoretical work around LTAD, development of expertise, National Governing body schemes and incentives

Talent development:
Biological, psychological and social aspects of development
Age-appropriate activities and coaching methods

National Curriculum for PE:
Key stages, guidelines for activities and Learning Outcomes, government policy development

International implementation of physical literacy:
Nations utilising the concept in national policy development – Wales, Canada, America
Fundamental movement skills
Early and late specialisation sports
<table>
<thead>
<tr>
<th>Learning Outcomes and Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pass</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Analyse the constituent components that underpin the definition of physical literacy</td>
</tr>
<tr>
<td><strong>P1</strong> Analyse the philosophical theories that underpin the international physical literacy association definition of physical literacy</td>
</tr>
<tr>
<td><strong>P2</strong> Discuss the outcomes you would attribute to the successful development of physical literacy</td>
</tr>
<tr>
<td><strong>LO2</strong> Plan an effective coaching session, underpinned by relevant theoretical frameworks, aimed at developing physical literacy characteristics in a specific population</td>
</tr>
<tr>
<td><strong>P3</strong> Produce an effective practical session plan which develops the principles of physical literacy</td>
</tr>
<tr>
<td><strong>P4</strong> Create activities to address the physical literacy needs of a specific population</td>
</tr>
<tr>
<td><strong>LO3</strong> Deliver an effective practical coaching session addressing the physical literacy needs of a specific population</td>
</tr>
<tr>
<td><strong>P5</strong> Demonstrate effective coaching practice and techniques to develop physical literacy</td>
</tr>
<tr>
<td><strong>P6</strong> Differentiate coaching practice, techniques and activities to address specific physical literacy needs within your participant group</td>
</tr>
<tr>
<td><strong>Merit</strong></td>
</tr>
<tr>
<td><strong>LO1, LO2 &amp; LO3</strong></td>
</tr>
<tr>
<td><strong>D1</strong> Critically evaluate the impact of the philosophical underpinnings associated with physical literacy upon planning and coaching practice</td>
</tr>
<tr>
<td><strong>M1</strong> Critically analyse a range of definitions of physical literacy from different contexts</td>
</tr>
<tr>
<td><strong>M2</strong> Apply philosophical theory in the design of your practical session</td>
</tr>
<tr>
<td><strong>Distinction</strong></td>
</tr>
<tr>
<td><strong>M3</strong> Critically analyse coaching practice to adapt activities to enhance outcomes for all participants</td>
</tr>
<tr>
<td>Pass</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td><strong>LO4</strong> Discuss how the implementation of physical literacy could influence models of athlete development and physical education programmes</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.physical-literacy.org.uk International Physical Literacy Association
About
General reference
sportforlife.ca Canadian Sport 4 Life
Resources
General reference

Links
This unit links to the following related units:
Unit 5: Coaching Practice & Skill Development
Unit 12: Community Coaching
Unit 15: Advanced Coaching
Unit 16: Performance Analysis
Unit 29: Teaching Practice
Unit 24: Personal & Professional Development

Unit code | Y/616/1063
---|---
Unit level | 5
Credit value | 15

Introduction

Personal and professional development is important within the sports industry and is essential for career progression. Over time, it has become the responsibility of employees to identify their own strengths and areas for improvement and suggest ways in which they can develop their skills to meet the needs of the organisation and facilitate career progression.

This unit is designed to enable students to assess and develop a range of professional and personal skills in order to promote future personal and career development. The unit will help students become confident in managing their own personal and professional skills to achieve personal and career goals. Initially, students will consider the range of careers available within public, private and voluntary sectors within the sports industry. Exploration of the skill and experience requirements of different careers will enable students to consider their own knowledge, skills, experience, practice, values and beliefs in relation to working in the sports industry.

After reviewing careers within the sports industry and the skill and experience requirements of them, students will focus on personal and professional development. They will have the opportunity to complete their own development plan by considering their own qualities, skills, experience and current and future needs. Students will be expected to implement their development plan and then review its effectiveness. Throughout the completion of these plans, students will develop the ability to draw on a range of sources of information to assess their personal and professional development, including their vocational experience and other relevant experiences such as their formal study, employment and/or voluntary activity.

On successful completion of this unit, students will be able to use appropriate tools to assess personal and professional needs and plan appropriate methods to meet these needs through training and professional development. They will be able to review the effectiveness of these plans in meeting their own development needs in relation to specific roles within the sports industry. Students will have developed the ability to self-appraise which is crucial for career progression within the sports industry.
Learning Outcomes

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

1. Explore the skill and experience requirements of careers within the sports industry
2. Assess own personal and professional skills
3. Produce a personal and professional development plan
4. Carry out a personal and professional development plan.
Essential content

LO1 Explore the skill and experience requirements of careers within the sports industry

Careers within the sports industry:

Key pathways – coaching, sports science (e.g. sports therapist and injury management, sport psychologist, nutritionist), exercise and fitness (e.g. fitness instructor, personal trainer, strength and conditioning coach), sports development (e.g. sports development officers, National Governing Body (NGB) officers, sports administrator), leisure management (e.g. facility management, grounds keeping, activity co-ordinator), education (e.g. PE teacher, college/university lecturer), sports journalism

Sectors – public, private, voluntary, public/private partnerships

Employers – local, national and international (public, private and voluntary)

Employment contracts – full-time, part-time, fixed-term contract, zero-hours contract, apprenticeships, self-employment (independent, subcontracted).

Skills:

Qualities, e.g. reliability, commitment, resilience, empathy, emotional intelligence, self-discipline, creativity, problem-solving, initiative, confident, motivated

Communication skills, e.g. effective listening, respect of others’ opinions, negotiation, persuasion, assertiveness, presentation skills, e.g. the use of ICT

Working with others, e.g. teamwork, flexibility/adaptability, social skills, leadership, co-operation

Time management, e.g. organisational skills, time management, prioritising workloads, setting work objectives, using time effectively

Technical skills, e.g. coaching, instructing, leading, administering test procedures

LO2 Assess own personal and professional skills

Skills assessment:

Methods of assessment. e.g. questionnaires, interview, observation

Self-appraisal, e.g. skills audit (personal profile using appropriate self-assessment tools, SWOT analysis (strengths, weaknesses, opportunities, threats)
Skills and experience:
Qualities, e.g. reliability, commitment, resilience, empathy, self-discipline, creativity, problem-solving, initiative, confident, motivated
Communication skills, e.g. effective listening, respect of others' opinions, negotiation, persuasion, assertiveness, presentation skills, e.g. the use of ICT
Working with others, e.g. teamwork, flexibility/adaptability, social skills, leadership, co-operation
Time management, e.g. organisational skills, time management, prioritising workloads, setting work objectives, using time effectively
Technical skills, e.g. coaching, instructing, leading, administering test procedures
Experience, e.g. paid, voluntary, recreational, relevance to the sports industry

LO3 Produce a personal and professional development plan

Development plan:
Contents of plan – current performance, aims and objectives, goals, needs and expectations, strengths, areas for improvement, skills/knowledge/qualifications required, action plans, learning programme/activities, achievement and review dates, future needs

Portfolio building to support plan:
Developing portfolio, e.g. CV, personal statement, qualification and training certificates, record of training, evidence of experience, development plan
Maintaining portfolio – updating contents, relevance of portfolio to career goals, continuous review, maintaining contents in relation to development plan

LO4 Carry out a personal and professional development plan

Carry out development plan:
Training, e.g. coaching qualifications, fitness qualifications, health and safety qualifications (e.g. first aid, manual handling), conflict management, assertiveness training, time management, unconscious bias training
Learning from others, e.g. observation, mentoring, supervision, tutorials, informal networks, team members, line managers, other professionals, where applicable
Evaluation of progress, e.g. recording progress, updating portfolio, responding to feedback, resetting aims, objectives and goals
Review development plan:
Effectiveness – strengths, areas for improvement, recommendations for future development, completion of aims and objectives, links to SWOT analysis
Monitoring and evaluation of effectiveness, e.g. interviews, observation, peer assessment
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explore the skill and experience requirements of careers within the sports industry</td>
<td><strong>M1</strong> Compare and contrast the skill and experience requirements of careers within the sports industry</td>
<td><strong>D1</strong> Justify the skill and experience requirements of careers within the sports industry in relation to relevant job descriptions.</td>
</tr>
<tr>
<td><strong>P1</strong> Review different job opportunities within the sports industry</td>
<td><strong>P2</strong> Assess the skill and experience requirements of careers within the sports industry</td>
<td><strong>D2</strong> Justify areas for development making reference to the person specification and job description for a specific role in the sports industry</td>
</tr>
<tr>
<td><strong>LO2</strong> Assess own personal and professional skills</td>
<td><strong>M2</strong> Evaluate own suitability for a specific role in the sports industry identifying areas for development</td>
<td><strong>D3</strong> Critically evaluate how the personal and professional development plan will increase employment opportunities within the sports industry</td>
</tr>
<tr>
<td><strong>P3</strong> Complete a personal SWOT analysis, identifying strengths, weaknesses, opportunities and threats</td>
<td><strong>P4</strong> Assess your suitability for a specific role in the sports industry</td>
<td><strong>M3</strong> Justify the contents of a personal and professional development plan in relation to the person specification for a specific role in the sports industry</td>
</tr>
<tr>
<td><strong>LO3</strong> Produce a personal and professional development plan</td>
<td><strong>M5</strong> Justify future personal and professional development needs</td>
<td><strong>D4</strong> Justify future personal and professional development needs to facilitate career progression within the sports industry</td>
</tr>
<tr>
<td><strong>P5</strong> Create a personal and professional development plan for a specific role in the sports industry</td>
<td><strong>P6</strong> Analyse different training and development opportunities</td>
<td><strong>D5</strong> Analyse future personal and professional development needs</td>
</tr>
<tr>
<td><strong>LO4</strong> Carry out a personal and professional development plan</td>
<td><strong>P7</strong> Implement a personal and professional development plan</td>
<td><strong>D6</strong> Review the effectiveness of a personal and professional development plan</td>
</tr>
<tr>
<td><strong>P8</strong> Review the effectiveness of a personal and professional development plan</td>
<td><strong>P9</strong> Analyse future personal and professional development needs</td>
<td><strong>D7</strong> Justify future personal and professional development needs</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Website
www.afpe.org.uk/physical-education/physical-education-matters PE Matters
www.bases.org.uk British Association of Sport and Exercise Sciences
www.jobs.ac.uk Jobs
www.jobs.theguardian.com Guardian jobs
www.leisureopportunities.co.uk Leisure Opportunities
www.tes.co.uk Times Educational Supplement

Links
This unit links to the following related units:

*Unit 4: Professional Skills*
*Unit 11: Injury Prevention*
*Unit 13: Sports Massage*
*Unit 25: Work Experience*
*Unit 30: Entrepreneurism in Sport*
Unit 25: Work Experience

<table>
<thead>
<tr>
<th>Unit code</th>
<th>H/616/1065</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Work experience is imperative if students are to be successful and create future employability opportunities. In recent years, owing to the number of skills and experiences required in this diverse industry and to the growing number of sport graduates, experience in a work setting has grown in importance. Students wanting to work in the sport industry require more than just qualifications because of the competitive and popular nature of sport careers.

This unit allows students to gain experience in their chosen field of sport. Students will investigate employment opportunities within the sports industry, identifying the different organisations and roles within it. In doing so, they may be able to identify a specific area of interest for work experience and possible future employment. Securing the placement may include initial communication with the employer, meetings about roles and responsibilities and agreeing the aims of the placement.

This unit then requires the student to undertake the placement. The placement supervisor and academic tutor will observe the student and the student will record their activities and log their progress in the form of a diary, logbook, portfolio and spreadsheets. Finally, the student will be required to evaluate the placement with regard to their performance and skills, the success of the placement and what they would do differently in the future.

On successful completion of the unit, the student will have gained a number of employability skills such as time management, communication and interpersonal skills, and task prioritisation. Furthermore, the student will gain the ability to evaluate their own performance against the original aims and use monitored data to provide an accurate judgement of the success of the placement.

Please note we recommend a minimum of 20 hours work experience with flexible completion (hours can be completed in one or more placements as long as assessment criteria is achieved).
Learning Outcomes

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

1. Investigate different work experience opportunities within the sport industry
2. Develop a work experience placement
3. Undertake a work experience placement
4. Evaluate the work experience placement.
Essential content

LO1 Investigate different work experience opportunities within the sport industry

Suitable organisations:
Local authority (LA)
Local county sport partnership (CSP)
Leisure centres
National Governing Body (NGB)
Sport clubs (elite, grassroots)
Schools (primary, secondary, further)
Health service (lifestyle improvement, sport therapy)

Suitable job roles:
Sport development officer
Sport coach
PE/sport teacher
Personal trainer
Lifestyle adviser
Performance analyst
Sport nutritionist
Sport psychologist
Physiotherapist

Requirements of roles:
Qualifications: PGCE, degree, master's, PhD, personal training qualifications, professional qualifications, accreditation to awarding boards
Skills and qualities required: teamwork, communication skills, time management, prioritising, monitoring and evaluation skills, use of technology, problem-solving abilities, decision-making
LO2 **Develop a work experience placement**

*Negotiation:*
Methods of contacting organisations
Methods of undertaking negotiations
Employer and placement requirements
Student and unit requirements

*Considerations of placement:*
Aims and objectives for placement and student
Personal development
Benefits to organisation
Business constraints/personal barriers

*Plan of placement:*
Times and dates
Roles and responsibilities
Dates of reviews and observations
Expected input from work supervisors
KPIs
Health and safety considerations

LO3 **Undertake a work experience placement**

*Carry out the placement:*
Carry out agreed duties and tasks agreed in negotiation and plan
Develop new skills and qualities required for job role
Undertake require training and/or procedures
Work to codes of practice and codes of conduct
Communicate with employer and supervisors: meetings, emails
**Record and monitor activities:**
Systematic recording of activities: logbook, diary, portfolio, spreadsheets, databases, hours completed, observations, reviews
Feedback from employer and/or customers
Skills and qualities required to carry out the job role – examples should be provided

**LO4 Evaluate the work experience placement**

**Evaluation of own performance:**
Achieved original aims and objectives
Overcome problems/constraints
Comments and observation from work and academic supervisors
Weaknesses and strengths of different skills and qualities: communication skills, time management, using initiative, problem-solving
Completion of tasks

**Evaluation of placement:**
New experiences gained
Teamwork and team dynamics
Suitability of position (roles and responsibilities)
What would you do differently next time?
Business constraints

**Individual development plan:**
List areas of improvement
Justification of the required improvements
Plan of training, CPD or qualifications required
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO1</td>
<td>Investigate different work experience opportunities within the sport industry</td>
<td>D1 Justify the selected job role for work experience placement with regard to benefiting the employer and employee</td>
</tr>
<tr>
<td>P1</td>
<td>Investigate different organisations and job roles available in the sport industry</td>
<td>M1 Compare the suitability of job roles for your work experience placement</td>
</tr>
<tr>
<td>P2</td>
<td>Assess the requirements for a variety of job roles in the sport industry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO2 Develop a work experience placement</td>
<td>D2 Critically analyse potential business constraints and personal barriers of the work experience placement</td>
</tr>
<tr>
<td>P3</td>
<td>Carry out negotiation with organisation for work experience placement</td>
<td>M2 Assess considerations for the work experience placement</td>
</tr>
<tr>
<td>P4</td>
<td>Develop a plan for the placement with work experience placement supervisor</td>
<td>M3 Communicate roles and responsibilities for the work experience placement</td>
</tr>
<tr>
<td>M4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO3 Undertake a work experience placement</td>
<td>D3 Justify the importance of the placement to the organisation, using systematic records of the placement to support</td>
</tr>
<tr>
<td>P5</td>
<td>Undertake work experience placement</td>
<td>M4 Report ongoing tasks and activities completed in work experience placement</td>
</tr>
<tr>
<td>P6</td>
<td>Compose suitable recording and monitoring techniques to review work experience placement</td>
<td>M5 Apply recording and monitoring techniques throughout work experience placement</td>
</tr>
<tr>
<td>M6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO4 Evaluate the work experience placement</td>
<td>D4 Suggest a future development plan to improve employability in the field of work experience placement</td>
</tr>
<tr>
<td>P7</td>
<td>Evaluate own performance when undertaking the work experience placement</td>
<td>M6 Critically analyse the learning that has taken place during the work experience placement, using suitable examples as evidence</td>
</tr>
<tr>
<td>P8</td>
<td>Review the placement, with regard to the job role and organisation of the employer</td>
<td>M7 Develop recommendations on how the work experience placement could have been enhanced</td>
</tr>
</tbody>
</table>
### Recommended resources

#### Textbooks


TROUGHT, F. (2017) *Brilliant employability skills. How to Stand Out from the Crowd in Graduate Job Market*.


#### Websites

<table>
<thead>
<tr>
<th>Website</th>
<th>Link</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.careers-in-sport.co.uk">www.careers-in-sport.co.uk</a></td>
<td></td>
<td>Careers in sport</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jobs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dataset</td>
</tr>
<tr>
<td><a href="http://www.eis2win.co.uk">www.eis2win.co.uk</a></td>
<td></td>
<td>EIS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opportunities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EIS Vacancies</td>
</tr>
<tr>
<td><a href="http://www.monster.co.uk">www.monster.co.uk</a></td>
<td></td>
<td>Monster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Career Advice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CV writing</td>
</tr>
</tbody>
</table>

#### Links

This unit links to the following related units:

- **Unit 4: Professional Skills**
- **Unit 24: Personal & Professional Development**
- **Unit 28: Leadership & Management**
- **Unit 30: Entrepreneurism in Sport**
Unit 26: Exercise Physiology

<table>
<thead>
<tr>
<th>Unit code</th>
<th>M/616/1067</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Exercise physiology uses knowledge of how the body changes and adapts to exercise to predict and plan for such things as training programmes and performance-related targets. It applies the knowledge of the musculoskeletal system and cardio-respiratory system to analyse and respond to training and exercise needs. It is a practical and exciting process which explores testing protocols to make suggestions for how an athlete might change their training approach or technique.

This unit builds upon Unit 3: Anatomy & Physiology by researching further into the systems at work during sport and exercise. It recognises that success in sport and exercise is a culmination of the many factors at work in sporting performance. Increasingly, lifestyle choices can play a role in impacting upon effective sports or exercise performance. This unit will address some of these factors and consider how they may be measured, analysed and applied in training.

It will consider the acute and chronic adaption to the cardiovascular, respiratory, muscular, skeletal systems and the energy systems used. Performance analysis techniques will be used to investigate the anatomical and physiological demands of sporting and exercise activities.

This unit will appeal to students who are interested in careers in athlete development such as performance coaches or strength and conditioning coaches. It would also be appropriate for students wishing to teach physical education (PE), coach sporting technique or enter a profession such as physiotherapy or occupational therapy.
Learning Outcomes

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

1. Communicate the physiological basis of exercise
2. Discuss the acute changes and chronic adaptations as a result of aerobic and anaerobic exercise
3. Investigate factors that can impact upon acute and chronic adaptations to exercise and training
4. Examine the physiological demands of specific sport and exercise activities.
Essential content

LO1 Communicate the physiological basis of exercise

*Energy systems:*
- Aerobic synthesis of ATP
- Anaerobic – anaerobic synthesis of ATP, phosphocreatine, anaerobic glycolysis
- The changes in respiration and cardiovascular function when exercising (consider both strength and endurance)
- The endocrine system – the function of the endocrine system, homeostasis, key hormones and the relationship between the endocrine system and exercise

LO2 Discuss the acute and chronic adaptions as a result of aerobic and anaerobic exercise

*Muscular adaptions to exercise:*
- Different types of muscle fibres, their characteristics, and their recruitment during differing exercise intensities
- Muscle fibre adaptations

*Fatigue:*
- The effect this has on muscle force
- Central and peripheral factors that influence the onset of fatigue

*Respiratory adaptions to exercise:*
- Physiology theories associated with an individual's maximum oxygen uptake
- Identify the criteria to determine if an individual has reached their maximal oxygen uptake (VO₂ max)

*Physiological adaptations that occur due to aerobic training:*
- The cardiorespiratory system and aerobic metabolism

*Lactate production and removal:*
- Opposing theories of lactate's role in fatigue

*Mitochondrial adaptions*
LO3 **Investigate factors that can impact upon acute changes and chronic adaptations to exercise and training**

*Activities that can impact on rate and function:*
Exercise, sleep, anxiety, stress, illness and ergogenic aids, supplements and drugs

*Environmental factors:*
Altitude, season, ambient temperature

*Health and wellbeing factors:*
Disease, age, mental health, pregnancy, diet, athlete’s current physical profile, i.e. age, gender, weight, strength, speed, and power, height, weight, height-weight ratio, BMI, body fat, age, injury history, athlete’s strengths and weaknesses (e.g. power, acceleration, balance, mobility, flexibility)

*Sporting factors:*
Positioning or role, training programme, gender, somatotype, overtraining, the duration of the sport, land-based or water-based, individual or team-based sport, competitive level (e.g. professional)

*Aerobic analysis:*
Average heart rate, maximum heart rate, VO₂ max, average VO₂, and total distance

*Anaerobic analysis:*
Lactate threshold, anaerobic capacity and anaerobic power

LO4 **Examine the physiological demands of specific sport and exercise activities**

Interpret pulse/heart rate, blood pressure, peak flow and other simple anthropometric measures, e.g. BMI and body fat %
Measuring lung ventilation volumes, e.g. using the Douglas bag method
Assessment of VO₂ max
Measuring lactate threshold and OBLA
Perceived exertion rate, e.g. Borg RPE Scale
Simple tests that measure athlete’s power, acceleration, balance, and flexibility, e.g. Sergeant Jump, 30m sprint, one-rep max, stork stand, sit and reach
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Communicate the physiological basis of exercise</td>
<td><strong>M1</strong> Compare how physiological systems respond to aerobic and anaerobic exercise</td>
<td><strong>D1</strong> Analyse how the physiological systems work together when responding to exercise</td>
</tr>
<tr>
<td><strong>P1</strong> Explore the physiological systems used in exercise</td>
<td><strong>P2</strong> Discuss aerobic and anaerobic glycolysis</td>
<td><strong>P3</strong> Illustrate the acute adaptations to aerobic and anaerobic exercise</td>
</tr>
<tr>
<td><strong>P2</strong> Discuss aerobic and anaerobic glycolysis</td>
<td><strong>M2</strong> Discuss how training programmes and exercise choices affect acute and chronic adaptations</td>
<td><strong>P4</strong> Show the chronic adaptations that take place as a result of aerobic and anaerobic exercise</td>
</tr>
<tr>
<td><strong>LO2</strong> Discuss the acute and chronic adaptations as a result of aerobic and anaerobic exercise</td>
<td></td>
<td><strong>M3</strong> Justify how sport and exercise choices might impact upon these adaptations</td>
</tr>
<tr>
<td><strong>P3</strong> Illustrate the acute adaptations to aerobic and anaerobic exercise</td>
<td><strong>M3</strong> Justify how sport and exercise choices might impact upon these adaptations</td>
<td><strong>D2</strong> Analyse how the changes that occur allow for effective performance in either an aerobic or anaerobic training programme for an identified individual</td>
</tr>
<tr>
<td><strong>P4</strong> Show the chronic adaptations that take place as a result of aerobic and anaerobic exercise</td>
<td><strong>P5</strong> Review the environmental factors that can impact upon performance</td>
<td><strong>D3</strong> Research using an identified individual the factors which impact upon their performance</td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate factors that can impact upon acute changes and chronic adaptations to exercise and training</td>
<td><strong>P6</strong> Show how lifestyle factors can impact upon performance</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Review the environmental factors that can impact upon performance</td>
<td><strong>P6</strong> Show how lifestyle factors can impact upon performance</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Show how lifestyle factors can impact upon performance</td>
<td><strong>LO4</strong> Examine the physiological demands of specific sport and exercise activities</td>
<td><strong>M4</strong> Interpret the results of a range of laboratory-based fitness assessments and performance tests</td>
</tr>
<tr>
<td><strong>LO4</strong> Examine the physiological demands of specific sport and exercise activities</td>
<td></td>
<td><strong>D4</strong> Analyse the laboratory-based fitness assessments and performance tests in relation to a specific sporting case study</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.bases.org.uk British Association of Sport and Exercise Science

Physiology General reference

Links
This unit links to the following related units:

*Unit 3: Anatomy & Physiology*

*Unit 6: Training, Fitness, Testing*

*Unit 9: Biomechanics*

*Unit 11: Injury Prevention*

*Unit 13: Sports Massage*

*Unit 16: Performance Analysis*

*Unit 27: Advanced Nutrition*

*Unit 31: Biochemistry of Exercise*

*Unit 37: Sport Rehabilitation*
Unit 27: Advanced Nutrition

<table>
<thead>
<tr>
<th>Unit code</th>
<th>J/616/1074</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

The food we consume directly affects how the body functions. Our bodies need adequate nutrition otherwise they can begin to function abnormally. We can optimise our physical and psychological wellbeing by consuming a healthy balanced diet.

Our genetic make-up may predispose us to developing certain health conditions therefore our nutritional requirements are unique. This unit aims to equip the student with the knowledge, skills and competencies to develop an advanced understanding of nutrition and its core principles. It is advised that students have a basic knowledge of nutrition before commencing this unit.

Initially, this unit will investigate the language and terminology of nutrition, giving students a deeper knowledge of micro and macro nutrients and of phytonutrition. It will enable them to relate nutrition to the homeostasis of specific body systems and to their associated pathophysiology. Students will gain knowledge and understanding of energy balance and its relationship to physical performance as well as the function of nutrients and their role in returning the body to optimal health.

This unit will enable the student to gain an in-depth knowledge of the digestive system and the importance of having a healthy gut, with special emphasis on the specific foods that can enhance a healthy gut. They will learn about the microbiome and the concept of nutrigenomics and will gain a functional knowledge of nutrition and nutritional care for specific pathologies.
Learning Outcomes

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

1. Explore the nutritional elements that help to sustain and maintain physiological homeostasis
2. Investigate the pathophysiological processes associated with disease
3. Examine the microbiome and associated terms relating to gut health
4. Investigate the area of nutrigenomics and discuss why this may affect the future of diet prescription.
Essential content

LO1 Explore the nutritional elements that help to sustain and maintain physiological homeostasis

Nutritional factors affecting physical performance:
Sport, heart disease enzyme stimulation, free radical promotion, antioxidants, cholesterol and cancer

The role of phytonutrients and phytochemicals:
Effects on the body

Factors affecting energy production:
Circulation, hormone delivery, the role of fats and of vitamin D

LO2 Investigate the pathophysiological processes associated with disease

Nutrients and their effect on the body systems:
The musculoskeletal system, the digestive system, the endocrine system, the nervous system and the immune system
Nutrients to enhance the function of these systems, performance in sport and to prevent injury and disease

LO3 Examine the microbiome and associated terms relating to gut health

The microbiome, the microbiota:
Role of probiotics and prebiotics

The concept of dysbiosis:
Gut-brain connection
Alkaline and acidic diets, food intolerance and leaky gut
LO4 Investigate the area of nutrigenomics and discuss why this may affect the future of diet prescription

Categories of ergogenic aids:
E.g. creatine, L-carnitine, caffeine, ginseng, beetroot juice, hormone aids, alcohol, gels, sports drinks, supplements, bars

Controversial foods:
E.g. hydrogenated fats, food additives, e.g. aspartame, MSG, high fructose corn syrup, sugar, artificial colours, nitrates in meat, etc.
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explore the nutritional elements that help to sustain and maintain physiological homeostasis</td>
<td><strong>P1</strong> Explore how phytonutrients can affect body functions</td>
<td><strong>D1</strong> Provide evidence-based research relating to one sporting discipline that proves that these nutritional changes can aid optimum health</td>
</tr>
<tr>
<td><strong>P2</strong> Discuss the nutritional elements that can be incorporated into the diet of an athlete for optimal performance</td>
<td><strong>M1</strong> Examine the factors that affect energy production, with reference to performance in sport</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Investigate the pathophysiological processes associated with disease</td>
<td><strong>P3</strong> Demonstrate how nutrition can affect the functional ability of different body systems</td>
<td><strong>D2</strong> Critically analyse the outcomes of your research findings</td>
</tr>
<tr>
<td><strong>P4</strong> Investigate how specific nutritional considerations may prevent specific pathologies</td>
<td><strong>M2</strong> Research a case study on a pathology that has used nutrition as a therapy to enhance the productivity of the chosen body system</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Examine the microbiome and associated terms relating to gut health</td>
<td><strong>P5</strong> Research the microbiome and related terms</td>
<td><strong>D3</strong> Investigate the specific microbes that should be present in the gut in order for it to function at an optimal level</td>
</tr>
<tr>
<td><strong>P6</strong> Discuss the problems that may arise when dysbiosis occurs, to include information on the gut-brain connection</td>
<td><strong>M3</strong> Examine the functions of different microbiota and make recommendations for diet supplementations for the repair of a leaky gut</td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Investigate the area of nutrigenomics and discuss why this may affect the future of diet prescription</td>
<td><strong>P7</strong> Investigate different types of ergogenic food products</td>
<td><strong>D4</strong> Justify the use of ergogenic aids in sport and exercise, with reference to journal articles on performance</td>
</tr>
<tr>
<td><strong>P8</strong> Discuss their effects on the body</td>
<td><strong>M4</strong> Examine the benefits of taking these products</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites

- Journal articles
- Research
- Topical issues

www.nutrition.org.uk
- Research
- General reference
- Nutrition science

Links

This unit links to the following related units:

*Unit 1: Nutrition*

*Unit 3: Anatomy & Physiology*

*Unit 7: Physical Activity, Lifestyle & Health*

*Unit 26: Exercise Physiology*

*Unit 31: Biochemistry of Exercise.*
Unit 28: Leadership & Management

<table>
<thead>
<tr>
<th>Unit code</th>
<th>K/616/1696</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

**Introduction**

Leadership and management skills are essential for any workplace – and not just those who officially hold positions of authority. Skills for leadership are essential in any effective team and allow individuals to develop as well as meet targets and create successful projects.

Developing professional and effective relationships in the workplace is an essential skill for anyone looking to move forward in their career. This unit will enable students to identify the key characteristics of an effective leader and manager as well as to evaluate their own ability to lead groups and teams. Students will develop the skills of organisation, mentoring, delegation and coaching to make the best of any team and generate positive results.

Students will take part in many practical activities to develop inter- and intrapersonal skills, enabling them to reflect on their own professional conduct and performance.
Learning Outcomes

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

1. Develop techniques for effective organisation and delegation within a team
2. Review skills for feedback and management of individuals to improve performance
3. Discover methods for improving leadership and management skills
4. Demonstrate knowledge of coaching and mentoring to support team members.
**Essential content**

**LO1** Develop techniques for effective organisation and delegation within a team

*Key topics for managing effectively:*
- Responsibility and accountability
- Authority and power
- Dealing with setbacks

*Delegation:*
- Splitting up manageable tasks
- Identifying priorities for action
- Allocating tasks based on strengths and skills
- Empowerment of colleagues
- Setting and managing achievable targets

**LO2** Review skills for feedback and management of individuals to improve performance

*The role of the manager:*
- Skills: communication, assertiveness, difficult conversations
- Responsibilities: identifying issues, seeking help

*Feedback:*
- Effective praise
- Framing feedback
- Feedback for improvement

*Motivation:*
- Types of motivation
- Values of the team
LO3 **Discover methods for improving leadership and management skills**

*Workplace behaviour:*
- Assertion and aggression
- Professional language
- Role modelling

*Leadership styles:*
- Transformational/autocratic/democratic/servant/strategic, etc.

*Working as a team:*
- Identifying strengths and weaknesses
- Developing teamwork
- Honesty and integrity in the workplace

LO4 **Demonstrate knowledge of coaching and mentoring to support team members**

*The boundaries and ethics surrounding coaching and mentoring roles:*
- Coaching conversations and their place in the workplace
- Identifying appropriate scenarios for coaching or mentoring
- Characteristics of successful supportive relationships

*Skills and coaching approaches:*
- Qualities and characteristics
- Identifying personality traits
- GROW model
- Models of reflective practice, i.e. Gibbs, Kolb
- The structure of coaching conversations
- Transformational leadership in practice (Bass & Riggio, 2006)
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Develop techniques for effective organisation and delegation within a team</td>
<td><strong>M1</strong> Justify delegation of tasks to individuals, taking into account strengths and weaknesses</td>
<td><strong>D1</strong> Demonstrate effective planning and organisation within the leadership of an activity</td>
</tr>
<tr>
<td><strong>P1</strong> Differentiate between authority and power, responsibility and accountability</td>
<td><strong>P2</strong> Conduct planning tasks designed to achieve project objectives</td>
<td></td>
</tr>
<tr>
<td><strong>P3</strong> Investigate and report the role of the manager in improving an individual’s performance</td>
<td><strong>P4</strong> Recognise the characteristics of effective feedback to improve performance</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Demonstrate knowledge of the difference between aggression and assertiveness in the workplace</td>
<td><strong>P6</strong> Review interpersonal skills and qualities and how they may affect team dynamics</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Review skills for feedback and management of individuals to improve performance</td>
<td><strong>M2</strong> Explore the use of feedback and motivation to support performance improvements</td>
<td><strong>D2</strong> Evaluate personal approach to feedback and motivation and identify areas for improvement</td>
</tr>
<tr>
<td><strong>M3</strong> Review methods for improving management and leadership performance</td>
<td><strong>D3</strong> Reflect on leadership and management experiences and create an action plan for improvement</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Discover methods for improving leadership and management skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Differentiate between coaching and mentoring and the roles they play in team development</td>
<td><strong>P8</strong> Investigate when coaching or mentoring are more appropriate and which methods to use</td>
<td><strong>M4</strong> Explore the use of different coaching and mentoring techniques in a variety of situations</td>
</tr>
<tr>
<td><strong>M4</strong> Explore the use of different coaching and mentoring techniques in a variety of situations</td>
<td><strong>D4</strong> Apply knowledge of coaching and mentoring when leading a group project</td>
<td></td>
</tr>
</tbody>
</table>

Recommended resources

Textbooks


Links

This unit links to the following related units:

Unit 2: Fundamentals of Sport & Exercise Psychology

Unit 12: Community Coaching

Unit 25: Work Experience.
Unit 29: Teaching Practice

<table>
<thead>
<tr>
<th>Unit code</th>
<th>L/616/1061</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

For many professionals working in the sport and exercise sector, teaching offers many opportunities for developing a career. These opportunities include teaching or coaching children in a physical education and school sport session, classroom practice in physical education and sport examination subjects, teaching physical education and sport in a special needs setting and perhaps working with students who wish to study the subject at college or university.

In this unit students will explore ways to expand on teaching experience and subject knowledge in a variety of teaching scenarios and settings. Students will gain insight into the range of ways children and young people might learn new knowledge or skills and develop an understanding of how to support, enable and monitor progress. Students will also design programmes of study and explore creative assessment methods to motivate and engage all students.

By the end of the unit, students will be able to demonstrate confidence and competence in teaching a range of sport and exercise activities. They will have devised teaching materials for a series of taught sessions and will be able to reflect on the delivery of those sessions in order to be prepared to take their first steps into teaching or coaching.
Learning Outcomes

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

1. Explore a range of techniques for teaching physical education
2. Plan a sequence of lessons for an area of physical education
3. Undertake a sequence of lessons in an educational setting
4. Examine the effectiveness of chosen teaching approaches.
Essential content

LO1 Explore a range of techniques for teaching physical education

Teaching methodologies:
Teaching and learning styles
Differentiation and inclusion
Motivation and engagement
Sport education
Teaching games for understanding
Resource-based learning
Child-centred teaching and learning
Problem-based learning

LO2 Plan a sequence of lessons for an area of physical education

Planning:
Creating lesson objectives and success criteria
Formal and informal assessment activities
Formative and summative assessment
Effective questioning
Use of learning resources
Flipping the classroom
Schemes of work and session plans
The starter and the plenary
Teacher modelling
Inclusive practice
Teaching points for skill and tactic understanding
Constructive alignment
LO3 **Undertake a sequence of lessons in an educational setting**

*Contexts:*
- Large group or lecture
- Masterclass
- Small group
- one-to-one
- Online/video lesson

*Delivery:*
- Pace and style
- Transitions and plenaries
- Assessment and checking learning
- Questioning strategies
- Feedback
- Alignment with learning objectives
- Health and safety considerations
- Teacher modelling

*Classroom management:*
- Use of resources
- Engagement and inclusivity
- Behaviour management

LO4 **Examine the effectiveness of chosen teaching approaches**

*Reflecting:*
- Reflecting on teaching and learning
- Peer observation
- Self-evaluation
- Student satisfaction
- Student achievement
- Use of observations
- Identifying strengths and areas for development
- Target setting
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explore a range of techniques for teaching physical education</td>
<td><strong>M1</strong> Critique pedagogic theories in the context of an area of the physical education curriculum</td>
<td><strong>D1</strong> Justify the suitability of your planning for both the subject area and expected student needs</td>
</tr>
<tr>
<td><strong>P1</strong> Examine a range of ways of teaching physical education</td>
<td><strong>M2</strong> Organise teaching resources to support learning across a series of planned sessions</td>
<td><strong>D2</strong> Critically self-evaluate the teaching, learning and assessment that has taken place</td>
</tr>
<tr>
<td><strong>P2</strong> Discuss techniques to support a range of students needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Plan a sequence of lessons for an area of physical education</td>
<td><strong>M3</strong> Employ assessment strategies to support students' learning</td>
<td><strong>M4</strong> Respond to student progress in real time and through the modification of teaching plans and materials</td>
</tr>
<tr>
<td><strong>P3</strong> Produce a scheme of work that outlines learning objectives and assessment strategy towards an overall aim.</td>
<td></td>
<td><strong>LO3 &amp; LO4</strong></td>
</tr>
<tr>
<td><strong>P4</strong> Design session plans to illustrate tasks and activities that will support students in achieving targeted learning outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Undertake a sequence of lessons in an educational setting</td>
<td></td>
<td><strong>D2</strong> Critically self-evaluate the teaching, learning and assessment that has taken place</td>
</tr>
<tr>
<td><strong>P5</strong> Research an appropriate teaching opportunity and arrange to be observed teaching</td>
<td><strong>M5</strong> Justify developments and modifications made to your plans and materials in response to student progress</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Deliver a series of teaching sessions in a chosen context</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Examine the effectiveness of chosen teaching approaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Record student progress across the taught sessions</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P8</strong> Examine the effectiveness of teaching techniques and delivery methods used</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Journals


*European Physical Education Review*. Sage.

*Journal of Physical Education, Recreation and Dance*. Taylor and Francis.


*Physical Education Matters and Primary Physical Education Matters*. AfPE.

*Physical Education and Sport Pedagogy*. Taylor and Francis.

*Sport, Education and Society*. Taylor and Francis.
Websites

www.afpe.org.uk  The Association for Physical Education
Home page
General reference

www.ndta.org.uk  The National Dance Teachers Association
Home page
General reference

www.youthsporttrust.org  The Physical Literacy Framework
Home page
General reference

Links

This unit links to the following related units:

Unit 5: Coaching Practice & Skill Development
Unit 19: Contemporary Issues in Health
Unit 23: Physical Literacy
Unit 34: Innovation in Coaching.
Unit 30: Entrepreneurism in Sport

<table>
<thead>
<tr>
<th>Unit code</th>
<th>R/616/0963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

“Ultimately, there's only one way to start your career, and that's by starting a business. If you find yourself hesitating, remember my motto: Screw it, just do it,” explained Sir Richard Branson, the Virgin Group founder, in 2017. He further stated, “You’re never too young to be an entrepreneur,” “it's important to remember that some of the world’s greatest ideas and innovations have come from young people who tackle seemingly unsolvable problems with lively determination.”

Rapid changes in the world have created the right conditions for entrepreneurship to thrive and prosper. Because of people's engagement with innovative ideas and concepts, there is a huge amount of interest in this subject area. Some of the key reasons why people want to begin their own businesses are to pursue their own ideas, realise financial rewards and to be their own boss. Many people – in nearly every corner of the world – are realising this dream of owning and operating a business of their own as entrepreneurship continues to thrive.

The aim of this unit is to provide students with the opportunity to understand what it takes to be an entrepreneur. They will develop their understanding of the skills and characteristics of today's successful entrepreneurs while reflecting upon their own skills and qualities in this area. They will be given the opportunity to develop an enterprise, creating a business plan that will be relevant to starting up a business within the relevant context. Students will be expected to gain skills in preparing a business start-up.

This module aims to combine both context and practical-based assessments. This will help students to gain a greater level of understanding of the mechanics of developing and starting a new enterprise.
Learning Outcomes

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

1. Explore the key characteristics and skills of entrepreneurs
2. Examine the factors that have contributed to the growth and development of entrepreneurship
3. Investigate the development of a business idea suitable for the sports industry
4. Produce a business start-up plan, suitable for a new entrepreneurship within the sports industry.
Essential content

LO1 Explore the key characteristics and skills of entrepreneurs

*Characteristics of entrepreneurs:*
Features, e.g. risk taking, opportunism, self-motivation, people person, goal setting, perseverance, dealing with failure, initiative, tolerance, uncertainty, using feedback, flexibility, innovative, emotional intelligence, understanding of the business environment, vision, passion, obsessive commitment

*Skills:*
Abilities, e.g. time management, financial and market awareness, commitment, assertiveness, communication and literacy, planning, target setting, problem-solving, decision-making, creativity, selling, leadership, entrepreneurial skills, interpersonal skills, dynamics of working with other and within teams, business and customer awareness, positive attitude, application of number, application of information technology

*Self-appraisal:*
Personal SWOT, personal action plan to achieve objectives that relate to the personal skills and characteristics of entrepreneurs

LO2 Examine the factors that have contributed to the growth and development of entrepreneurships

*Driving forces/factors behind the increase in entrepreneurships:*
Passion for business and growth within it
The need for innovation within industries
Meeting the ever-changing demands of customers within an industry
Developments/changes within the macro environment (PEST)
e-commerce and the world wide web
Globalisation – international opportunities
LO3 Investigate the development of a business idea suitable for the sports industry

*Analysing the business environment surrounding the sports industry:*

PEST analysis
Porter’s five forces
Development of business ideas suitable for the sports industry – opportunities, trends, diversification, new technology
Generating a vision for a new business idea

LO4 Produce a business start-up plan, suitable for a new entrepreneurship within the sports industry

*Description of the business:*

Micro-, small-, medium-sized business
Creating mission, vision and values, short, medium- and long-term goals
Aims and objectives of the entrepreneurship
Features and benefits of the entrepreneurship
Unique selling point of the product(s)/service(s) created
Market analysis (competition, target market, market segmentation)
Marketing communication strategy
Corporate social responsibility, ethical considerations

*Sources of finance:*

Family, friends, redundancy packages, buyouts, venture capital, remortgaging, banks, grants

*Sources of support:*

Consultation with experts, entrepreneurs and business links, Young Enterprise (YE), The Prince’s Trust, etc.
<table>
<thead>
<tr>
<th>Learning Outcomes and Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pass</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Explore the key characteristics and skills of entrepreneurs</td>
</tr>
<tr>
<td><strong>P1</strong> Explore the key characteristics and skills of entrepreneurs and entrepreneurshipsv</td>
</tr>
<tr>
<td><strong>P2</strong> Undertake a self-appraisal that can be benchmarked against successful entrepreneurs</td>
</tr>
<tr>
<td><strong>LO2</strong> Examine the factors that have contributed to the growth and development of entrepreneurships</td>
</tr>
<tr>
<td><strong>P3</strong> Examine how enterprises within an area of the sports industry have grown and developed</td>
</tr>
<tr>
<td><strong>P4</strong> Analyse the factors that have led to the growth and development of entrepreneurships within the sports industry</td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate the development of a business idea suitable for the sports industry</td>
</tr>
<tr>
<td><strong>P5</strong> Create a business idea suitable for the sports industry</td>
</tr>
<tr>
<td><strong>LO4</strong> Produce a business start-up plan, suitable for a new entrepreneurship within the sports industry</td>
</tr>
<tr>
<td><strong>P6</strong> Create a business start-up plan suitable for an entrepreneurship within the sports industry</td>
</tr>
<tr>
<td><strong>P7</strong> Examine sources of funding available for new entrepreneurships</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.gov.uk/browse/business/setting-up UK Government Business and self-employed page
www.gov.uk/browse/business/setting-up General reference
www.young-enterprise.org.uk Young Enterprise Home page
www.young-enterprise.org.uk General reference
www.sage.co.uk/business-advice Sage Business advice page
www.sage.co.uk/business-advice General reference
Links

This unit links to the following related units:

*Unit 18: Exercise Prescription*

*Unit 24: Personal & Professional Development*

*Unit 25: Work Experience.*
Unit 31: Biochemistry of Exercise

<table>
<thead>
<tr>
<th>Unit code</th>
<th>M/616/1697</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

A range of professions in the sport and exercise industry, such as being a coach or sports nutritionist, requires an understanding of the biochemistry of exercise in order to help to improve athletes’ sporting performance.

This unit provides students with an overview of the biochemical process in the human body and how it responds to the stresses of exercise. Students will explore different types of cells and how their structure relates to their function. The student will examines homeostasis in relation to maintenance of pH levels, oxygen levels, body temperature and osmotic environment and how these vary and are controlled in relation to exercise participation. Students will also 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.

On successful completion of this unit, students will be able to describe the structure and function of human cells and the organelles within them. They will be able to explain metabolic processes, their changes during exercise and their limitations to exercises and performance in sport. Finally, they will gain an understanding of the living cell and the cellular inclusions with it, and which is fundamental for a study of metabolic events.
Learning Outcomes

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

1. Explore the structure and function of human cells
2. Discuss the homeostatic systems that maintain the function of human cells
3. Investigate the metabolic processes that provide energy for exercise
4. Examine how participation in exercise affects metabolic processes.
Essential content

LO1 **Explore the structure and function of human cells**

*Human cells:*
- Types of cells – skeletal muscle, cardiac muscle, smooth muscle, secretory, epithelial, erythrocyte, leukocytes, nerve
- Structure of cells – cell membrane, cytoplasm, nucleus, nucleolus, mitochondria, endoplasmic reticulum, ribosomes, golgi body, lysosomes
- Function of cells – principle of complementarity, metabolic functions of sub-cellular organelles

LO2 **Discuss the homeostatic systems that maintain the function of human cells**

*The cell and homeostasis:*
- Maintenance – pH, pO2, osmotic environment, temperature thermoregulation
- Homeostasis – control mechanisms, homeostasis imbalance, effects of exercise on homeostasis
- Fuel for exercise – carbohydrates, proteins, fats

LO3 **Investigate the metabolic processes that provide energy for exercise**

*Energy production:*
- Anaerobic energy production (phosphocreatine system and glycolytic system), by-products, capacity and limitation
- Aerobic energy production (aerobic glycolysis, Krebs Cycle, electron transport chain), by-products, capacity and limitation

*Metabolic processes:*
- Anabolic and catabolic processes
- Cellular chemical reactions – endergonic and exergonic reactions
- What are oxidation-reduction reactions?
- Control of metabolic activity by (co) enzymes – regulation and rate of activity
- Hormonal effects
- Effects on cells
LO4 Examine 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 – determination of basal metabolic rate, respiratory exchange ratio, blood sampling, muscle biopsies
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Explore the structure and function of human cells</td>
<td><strong>M1</strong> Compare the structures and functions of different types of human cells</td>
<td><strong>D1</strong> Analyse the structures and functions of different types of human cell</td>
</tr>
<tr>
<td><strong>P1</strong> Explore the structure of different types of human cell</td>
<td><strong>P1</strong> Explore the structure of different types of human cell</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Discuss the function of different types of human cell</td>
<td><strong>M2</strong> Investigate how the pH, pO2, temperature and osmotic environment of human cells are maintained</td>
<td><strong>D2</strong> Critically analyse how temperature and osmotic environment of human cells are maintained</td>
</tr>
<tr>
<td><strong>P3</strong> Discuss how the pH, pO2, temperature and osmotic environment of human cells are maintained</td>
<td><strong>M3</strong> Assess how the metabolism of carbohydrate, lipid and amino acid affect the human cells</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Explore the metabolism of carbohydrate, lipid and amino acid</td>
<td><strong>P4</strong> Explore the metabolism of carbohydrate, lipid and amino acid</td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Discuss the homeostatic systems that maintain the function of human cells</td>
<td><strong>M4</strong> Assess the metabolism of carbohydrate, lipid and amino acid</td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Investigate anaerobic and aerobic energy production and how metabolic activity is controlled</td>
<td><strong>M5</strong> Examine hormonal effects on human cells</td>
<td><strong>D3</strong> Evaluate the anaerobic and aerobic energy production and how metabolic activity is controlled</td>
</tr>
<tr>
<td><strong>P6</strong> Discuss hormonal effects on human cells</td>
<td><strong>P6</strong> Discuss hormonal effects on human cells</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate the metabolic processes that provide energy for exercise</td>
<td><strong>M6</strong> Assess metabolic changes that occur during participation in exercise</td>
<td><strong>D4</strong> Justify metabolic changes and the rate of metabolism that occur during participation in exercise</td>
</tr>
<tr>
<td><strong>P7</strong> Explore metabolic changes that occur during participation in exercise</td>
<td><strong>P7</strong> Explore metabolic changes that occur during participation in exercise</td>
<td></td>
</tr>
<tr>
<td><strong>P8</strong> Examine the rate of metabolism during participation in different types of exercise</td>
<td><strong>M7</strong> Differentiate the rate of metabolism during participation in different types of exercise</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites

jap.physiology.org/content/69/5/1934


Links

This unit links to the following related units:

*Unit 1: Nutrition*

*Unit 3: Anatomy & Physiology*

*Unit 26: Exercise Physiology*

*Unit 27: Advanced Nutrition.*
Unit 32: Psychology for Performance

<table>
<thead>
<tr>
<th>Unit code</th>
<th>T/616/1698</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

In sport, success is often attributed to a performer’s psychological state. As a result, the application of psychology in sport is becoming increasingly prevalent. The field of sport psychology is, therefore, playing a more prominent role in sport as sports performers aim to gain every advantage they can over their opponents. To gain this advantage, sports teams and individuals employ sport psychologists to aid their mental preparation and to support them psychologically before, during and after competition.

The aim of this unit is to develop students’ knowledge of applied sport psychology and psychological skills training, which is the teaching and delivery of skills, strategies and techniques used to influence the behaviour of individuals and teams. The unit will, therefore, develop students’ knowledge of how psychological techniques can be applied to influence sports performance. The techniques and skills investigated in this unit can be applied to both sport and exercise settings, depending on the interests and needs of students. Exercise participants may use the techniques to promote their chances of adhering to an exercise programme, whereas sports performers will use these techniques to improve their performance and enjoyment of activities.

Students will also develop skills such as communication, practical application and reflection, all of which are crucial for gaining entry into the sport and fitness industry.

On successful completion of this unit, students will be able to use these methods to assess an individual’s psychological state and implement psychological techniques to improve performance. It is, therefore, of interest to students who seek employment within a sports coaching or personal training context or who wish to pursue further training to become a registered sport psychologist.
Learning Outcomes

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

1. Examine the role of sport psychology in performance development
2. Explore the psychological state of different athletes
3. Plan psychological skills training programmes to improve sports performance
4. Implement psychological skills training programmes to improve sports performance.
**Essential content**

**LO1** Examine the role of sport psychology in performance development

*Performance development:*

Psychological skills training, e.g. definition, aims, intended outcomes, (enjoyment, satisfaction, improved performance, enhanced psychological wellbeing), content (skills and techniques), myths and issues in psychological skills training, e.g. lack of understanding about the purpose of sport psychology, misconception (therapy rather than performance enhancement), wanting/expecting quick-fix solutions

*Role of a sport psychologist:*

Role, e.g. assessment, planning, education, implementation, mental/emotional support

Reflective practice and continuing professional development (CPD)

Professional and ethical boundaries, e.g. organisations accrediting sport and exercise psychologists (BPS – British Psychological Society, BASES – British Association of Sport and Exercise Science), working within codes of ethical practice

*Approaches to sport psychology:*

Approaches, e.g. humanistic, behaviourism, cognitivism, gestaltism

Psychodynamic, fit for purpose, appropriate for athlete's needs

**LO2** Explore the psychological state of different athletes

*Athletes:*

Type of sport: Team, e.g. football, netball, rugby, cricket, basketball, handball, volleyball

Individual. e.g. golf, horse riding, sailing, swimming, kayaking, athletics

Level of ability – novice, intermediate, expert

*Psychological factors:*

E.g. motivation, confidence, controlling emotions (anxiety, stress, arousal, aggression) goal setting, mental preparation, concentration, team cohesion, leadership and attentional focus
Assessment methods:
Performance profiling – psychological demands of different sports, ideal importance, self-assessment, discrepancy
Questionnaires, e.g. Athletic Coping Inventory (ACSI), Competitive State Anxiety Inventory (CSAI-2), Sport Competition Anxiety Test (SCAT), Sport Anxiety scale (SAS), Sport Motivation Scale (SMS), Eysenck’s Personality Inventory (EPI), Brunel University Mood Scale (BRUMS), Competitive State Sport Inventory (CSSCI), Task and Ego Orientation in Sport Questionnaire (TEOSQ), Test of Performance Strategies (TOPS), Group Environment Questionnaire (GEQ)
Interview, e.g. one-to-one consultation, open and closed questioning
Interview techniques, e.g. mirroring, active listening, probing
Observation, e.g. training, competition, manipulated scenarios
Needs assessment – strengths, areas for improvement, recommendations (skills and techniques)

LO3 Plan psychological skills training programmes to improve sports performance

Plan:
Content of plan – aims and objectives
Action plan to address aims and objectives
Daily and weekly content of plan
Psychological skills, e.g. motivation, confidence, arousal regulation, goal setting, attention and concentration
Models of psychological skills training, e.g. three-phase model (education, acquisition, practice), Kirshenbaum’s (1984) five-stage model (problem identification, commitment, execution, environment management, generalisation), Thomas’s (1991) seven-phase model (orientation, sport analysis, individual and team assessment, conceptualisation, psychological skills training, implementation, evaluation)

Psychological skills and techniques:
Psychological skills, e.g. motivation, confidence, arousal regulation, goal setting, attention and concentration
Psychological techniques, e.g. goal setting, performance profiling, progressive muscular relaxation, biofeedback, breathing techniques, use of music, autogenic training, imagery, mental rehearsal, pre-performance routines, self-talk, use of cue words, associative/dissociative strategies
LO4 Implement psychological skills training programmes (PSTP) to improve sports performance

Carry out PSTP:
Following guidelines, e.g. process of completing different techniques

Professional conduct:
Working within the codes of ethical guidance
Record of the completion of daily and weekly content
Implementation

Methods to improve motivation:
Goal setting (definition, benefits of goal setting, types of goals, e.g. outcome, performance and process, characteristics of effective goals, e.g. short- and long-term goals, group and individual goals, difficulty level, training and competition, stages in designing a goal-setting system, e.g. education, planning, implementation and evaluation)
Self-talk (definition, benefits of self-talk, functions, e.g. motivational and instructional, positive versus negative, optimising self-talk, other uses of self-talk, e.g. improving concentration, enhancing self-confidence, controlling arousal

Methods to improve attentional focus and concentration:
Definition of concentration, attentional focus, e.g. broad, narrow, internal, external
Attentional problems, e.g. internal distractors, attending to past and future events
Methods to influence attentional focus and concentration, e.g. establish pre-performance routines, use of cue words, self-talk, associative and dissociative strategies, exercises to improve attentional focus and concentration, e.g. parking thoughts, shifting attention, distraction training.
Methods to control arousal and anxiety:
Relaxation (definition, benefits, methods of relaxation, e.g. progressive muscular relaxation, use of music, breathing techniques, autogenic training, biofeedback
Psyching-up techniques (definition, when to use psyching up techniques, psyching-up techniques, e.g. positive statements, mood words, using music
Imagery (definition, benefit, use of all senses to create images, when to use imagery, e.g. before, during, after, training, competition, types of imagery, e.g. internal, external, motivation
General – mastery, cognitive specific, other uses of imagery, e.g. enhancing motivation, building self-confidence, enhancing concentration, mental rehearsal, visualisation

Review of a psychological skills training programme:
Effectiveness – strengths, areas for improvement, recommendations for future development
Links to aims, objectives and needs assessment
Monitoring and evaluation of effectiveness, e.g. questionnaires, interviews, observation, peer assessment
<table>
<thead>
<tr>
<th></th>
<th>Learning Outcomes and Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pass</strong></td>
<td><strong>Merit</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Examine the role of sport psychology in performance development</td>
<td><strong>P1</strong> Appraise the role of a sport psychologist</td>
</tr>
<tr>
<td><strong>P2</strong> Assess different approaches to sport psychology</td>
<td><strong>M1</strong> Compare and contrast the effectiveness of different approaches to sport psychology and their suitability for performance enhancement</td>
</tr>
<tr>
<td><strong>LO2</strong> Explore the psychological state of different athletes</td>
<td><strong>P3</strong> Assess the psychological state of a selected athlete using appropriate techniques</td>
</tr>
<tr>
<td><strong>P4</strong> Complete a needs assessment for a selected athlete</td>
<td><strong>M2</strong> Analyse the psychological state of a selected athlete, identifying the priorities for psychological skills training</td>
</tr>
<tr>
<td><strong>LO3</strong> Plan psychological skills training programmes to improve sports performance</td>
<td><strong>P5</strong> Develop a psychological skills training programme to improve sports performance for a selected athlete</td>
</tr>
<tr>
<td><strong>P6</strong> Assess a range of psychological techniques that can be used to improve sports performance for a selected athlete</td>
<td><strong>M3</strong> Justify the design of a psychological skills training programme to improve sports performance for a selected athlete</td>
</tr>
<tr>
<td>Pass</td>
<td>Merit</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>LO4</strong> Implement psychological skills training programmes to improve sports performance</td>
<td><strong>P7</strong> Conduct a psychological skills training programme for a selected athlete</td>
</tr>
<tr>
<td><strong>P8</strong> Use psychological techniques to improve the performance of a selected athlete</td>
<td><strong>D4</strong> Critically justify recommendations for future development in relation to the psychological needs of a selected athlete</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Journals
*Athletics Insight*
*Journal of Applied Sport Psychology*
*Journal of Sport and Exercise Psychology*
*Psychology of Sport and Exercise*
*The Sport Psychologist*

Links
This unit links to the following related units:
*Unit 2: Fundamentals of Sport & Exercise Psychology*
*Unit 5: Coaching Practice & Skill Development*
*Unit 15: Advanced Coaching*
*Unit 16: Performance Analysis.*
Unit 33: Strength & Conditioning for Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>A/616/1699</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

The contemporary sport sector is becoming more competitive, requiring athletes to maximise their physical proficiencies in order to withstand the high physiological and psychological demands of sport, as well as preventing injuries. The strength and conditioning practitioner's role is becoming more relevant within a multidisciplinary coaching team. This unit has inherent application within all areas of sport science and athlete rehabilitation as it examines specific requirements for different sports based on individuals' needs, making this unit highly relevant for sport coaching.

This unit aims to develop students' underpinning knowledge of the foundations of strength and conditioning, the application of different types of specific methods of training and the underlying theories of sports programming.

Topics included in this unit are weightlifting exercises for sports performance such as squat, clean and jerk and snatch, power, agility and speed training and periodisation training (macrocycle, mesocycle and microcycle) for athletes.

On successful completion of this unit, students will be able to coach weightlifting exercises with competence, define and apply training methods for strength, power, agility and speed training, and plan and justify training programmes for an athlete or team.
Learning Outcomes

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

1. Demonstrate competence in coaching weightlifting exercises for sports performance
2. Analyse methods of training for strength
3. Investigate training methods for power, agility and speed
4. Plan an effective training programme for an athlete or team
Essential content

LO1  Demonstrate competence in performing and coaching weightlifting exercises for sports performance

Coaching weightlifting exercises:

Demonstrate the key safety requirements when working in a weightlifting environment (spotting, breathing, body stance and alignment)

Demonstrate the delivery of the key coaching points for the stages (collection, start, descent, ascent, return, posture/alignment, breathing safety and dropping) of the back squat, overhead squat, front squat, single leg squat variations, bench press, press behind the neck and push

Demonstrate the key technical and safety points and demonstrate delivery of start position, grip, stance, ascent, descent, posture/alignment, breathing, safety and dropping in relation to the deadlift, clean first pull, stiff leg deadlift, single leg deadlift variations, power shrug and pull from thigh

Demonstrate the key technical and safety points and demonstrate delivery of start position, grip, stance, ascent, descent, posture/alignment, breathing, safety and dropping in relation to the split jerk

Demonstrate the key technical and safety points and demonstrate delivery of start position, grip, stance, ascent, descent, posture/alignment, breathing, safety and dropping in relation to the snatch and its derivatives

LO2  Analyse methods of training for strength

Methods of training for strength:

Analyse types of strength: general strength, specific strength, speed strength, maximum strength, muscular endurance, absolute strength and relative strength

Analyse methods of resistance application: body weight, elastic bands, weighted objects, weight stack machines, fluid resistance machines, free weights and isometric

Analyse manipulation of training variables: volume, training intensity, repetitions, sets, inter-set rest intervals, order of exercises, training frequency

Analyse loading patterns: flat pyramid, ascending pyramid, double pyramid, skewed pyramid and wave-loading model
LO3  **Investigate training methods for power, agility and speed**

*Methods of training for power, agility and speed:*

Investigate physio-mechanical issues relating to power training (plyometric) and demands placed on the body by different types of drills.

Key safety issues relating to plyometric training, dynamic warm-up and range of plyometric drills and key coaching points relating to drills and whole skill completion.

Investigate fundamental agility skills (acceleration, deceleration, backpedal, rounding cone, shuffle/cutting, open step and crossover step), the key mechanical and technical variables governing agility performance, dynamic warm-up and a range of agility based drills and key coaching points relating to drills and agility techniques.

Investigate different types of speed expression (acceleration and velocity) and mechanisms for their development, the mechanical and technical variables in straight-line maximal sprinting, dynamic warm-up and a range of sprint-based drills and key coaching points relating to drills and speed techniques.

Investigate methods of training for developing speed (speed, speed endurance, tempo extensive and intensive, special endurance), agility (closed drills, open drills, cone weave, side shuffle, 5-10-15 drill, figure eight, V-pattern), power (plyometric).

LO4  **Plan an effective training programme for an athlete or team**

*Planning:*

Plan a periodised strength programme for an athlete or team, e.g. the macrocycle, mesocycle, microcycle and a training session unit.

Plan a periodised power programme for an athlete or team, e.g. the macrocycle, mesocycle, microcycle and a training session unit.

Plan a periodised speed programme for an athlete or team, e.g. the macrocycle, mesocycle, microcycle and a training session unit.

Plan a periodised agility programme for an athlete or team, e.g. the macrocycle, mesocycle, microcycle and a training session unit.
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Demonstrate competence in coaching weightlifting exercises for sports performance</td>
<td><strong>M1</strong> Differentiate the key coaching points while undertaking back squat exercises</td>
<td><strong>D1</strong> Critically self-evaluate competences in performing and coaching back squat, the clean, snatch or jerk exercise</td>
</tr>
<tr>
<td><strong>P1</strong> Demonstrate competence while performing and coaching a back squat</td>
<td><strong>M2</strong> Discuss the key coaching points while undertaking the clean, snatch or jerk exercise</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Show competence while performing and coaching the clean, snatch or jerk exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Analyse methods of training for strength</td>
<td><strong>M3</strong> Differentiate between methods of training for strength in sports performance</td>
<td><strong>D2</strong> Evaluate methods of training for strength in sports performance</td>
</tr>
<tr>
<td><strong>P3</strong> Discuss methods of training for strength in sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Analyse the application of the methods of training for strength in sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Investigate training methods for power, agility and speed</td>
<td><strong>M4</strong> Evaluate one method of training for power, agility and speed in sports performance</td>
<td><strong>D3</strong> Critically analyse a method of training for power, agility and speed in sports performance</td>
</tr>
<tr>
<td><strong>P5</strong> Investigate methods of training for power in sports performance</td>
<td><strong>M5</strong> Demonstrate the application of a method of training for power, agility and speed</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Discuss methods of training for agility in sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Revise methods of training for speed in sports performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Plan an effective training programme for an athlete or team</td>
<td><strong>M6</strong> Show how the underpinning principles of periodisation have been applied for each programme</td>
<td><strong>D4</strong> Justify the structure of the periodised training programmes for strength and power, and speed and agility</td>
</tr>
<tr>
<td><strong>P8</strong> Plan a periodised training programme for strength and power</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P9</strong> Plan a periodised training programme for speed and agility</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended Resources

Textbooks


Websites
www.uksca.org.uk The UK Strength and Conditioning Association

journals.lww.com/nsca-scj/pages/default.aspx Strength and Conditioning Journal

Links
This unit links to the following related units:

*Unit 5: Coaching Practice & Skill Development*

*Unit 6: Training, Fitness and Testing*

*Unit 11: Injury Prevention*

*Unit 15: Advanced Coaching*

*Unit 18: Exercise Prescription*

*Unit 20: Health Community Engagement*

*Unit 21: Sport & Exercise for Specific Groups*

*Unit 37: Sport Rehabilitation*. 
Unit 34: Innovation in Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>H/616/1700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

As the vocation of sports coaching progresses towards professionalisation, an increasing body of research has emerged challenging coaches to understand, critique and apply new coaching frameworks and pedagogies to better support positive outcomes for athletes. Coaches are challenged to move beyond traditional models of leadership and linear pedagogy to explore successful frameworks from related performance fields such as business or education.

Coaching has progressed rapidly from early conceptions of its principal purpose of pure performance development to embrace and address challenges which put the athlete at the centre of the coaching process and ensure that the responsibility to develop the whole person is understood by all. Contemporary innovations in sports coaching challenge coaches to empower athletes. In order to understand the variety of outcomes that a good coach-athlete relationship brings together, a focus on research from physiological, psychological, sociological, philosophical and pedagogic areas is required so that contemporary practice can be challenged, enabling coaches to better rationalise and justify their craft.

This unit is designed to challenge students to understand innovations in coaching practice from a variety of fields and related environments. The unit will challenge assumptions about the role of the coach, success criteria and the potential of sport for holistic development. The unit will move beyond traditional linear models of delivery to challenge students to redefine effective leadership and embrace different models of coaching pedagogy.

Students successfully completing the module will be able to critically evaluate new methods and models of sports coaching from a variety of disciplines and apply these in practical coaching contexts, understanding their potential impact upon the athlete and sports performance.
Learning Outcomes

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

1. Review a range of contemporary pedagogic, psychological, sociological and leadership-related models and approaches
2. Investigate the impact of applying theory to a variety of different coaching contexts and cultures
3. Justify the application of relevant models within practice environments
4. Critically evaluate coaching practice observed in real-world contexts.
**Essential content**

**LO1** Review a range of contemporary pedagogic, psychological, sociological and leadership-related models and approaches

*Contemporary pedagogic models:*
- Constraints-led coaching
- Non-linear pedagogy
- Teaching Games for Understanding (TGFU), game sense, play practice

*Leadership models:*
- Transformational and transactional
- Servant leadership

*Psychological environments for performance*
- Self-determination theory
- Competence, autonomy, relatedness
- Athlete empowerment

**LO2** Investigate the impact of applying theory to a variety of different coaching contexts and cultures

*Different coaching contexts:*
- Long-term Athlete Development
- Physical literacy
- Talent development
- Performance and participation
- Sport for development
- Elite performance
Domains of coaching expertise
Elite
Children
Youth
Adult participation
Professional knowledge
Interpersonal and intrapersonal coaching skills

LO3 Justify the application of relevant models within practice environments

Session planning:
Pedagogic models
Training methods
Constructive alignment
Progression
Differentiation
Goal negotiation
Empowerment
Decision-making

LO4 Critically evaluate coaching practice observed in real-world contexts

Reflective practice:
Various models of reflection
Reflection in action, on action, retrospective

Observational tool/frameworks:
Structured, semi-structured, unstructured
Ethical processes around observation
Consent and anonymity
## Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Review a range of contemporary pedagogic, psychological, sociological and leadership-related models and approaches</td>
<td></td>
<td><strong>LO1 &amp; LO2</strong></td>
</tr>
<tr>
<td><strong>P1</strong> Discuss the strengths and challenges of a range of innovative coaching approaches</td>
<td><strong>M1</strong> Evaluate contemporary research surrounding innovative coaching approaches</td>
<td><strong>D1</strong> Critically evaluate the application of innovative coaching theory across a range of coaching contexts and cultures</td>
</tr>
<tr>
<td><strong>P2</strong> Explore the relevance of contemporary leadership theory from coaching, education and business environments</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Investigate the impact of applying theory to a variety of different coaching contexts and cultures</td>
<td><strong>P3</strong> Explore the needs of athletes within different coaching cultures</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Discuss the application of contemporary coaching innovations in a variety of coaching settings</td>
<td><strong>M2</strong> Justify the application of innovative coaching theory into a specific coaching context drawn from the talent spectrum from child development to elite performance</td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Justify the application of relevant models within practice environments</td>
<td><strong>P5</strong> Plan a coaching session utilising an innovative coaching approach</td>
<td><strong>D2</strong> Create and justify a pedagogic model to address the specific needs of the group/athlete being coached</td>
</tr>
<tr>
<td><strong>P6</strong> Deliver an effective coaching session demonstrating innovation.</td>
<td><strong>M3</strong> Adapt contemporary pedagogic models/theories to address the specific needs of the group/athlete being coached</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass</td>
<td>Merit</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>LO4</strong></td>
<td>Critically evaluate coaching practice observed in real-world contexts</td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong></td>
<td>Discuss appropriate tools for observing coach behaviours and practice in real-world contexts</td>
<td><strong>M4</strong></td>
</tr>
<tr>
<td><strong>P8</strong></td>
<td>Use an appropriate tool to critically evaluate a coach in their context.</td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.sportscoachuk.org Sports Coach UK
Resource bank
Research and training
www.championshipthinkingcoach.com/index.php Championship thinking coach
Skills expertise
General reference
www.greenleaf.org Servant Leadership
Resources
General reference

Links
This unit links to the following related units:
Unit 5: Coaching Practice & Skill Development
Unit 12: Community Coaching
Unit 29: Teaching Practice
Unit 35: Contemporary Issues in Coaching.
Unit 35: Contemporary Issues in Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>K/616/1701</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Sports coaching is a dynamic environment where the coach is required to reflect in the moment and respond to different scenarios and to the changing needs of their athletes or game/sport environment. To make a successful career in sports coaching, entrepreneurial skills, and the ability to solve problems efficiently and effectively while responding to rapid changes in policy and funding streams, need to be developed.

This unit aims to develop critical awareness of the international and local coaching contexts as well as a variety of contemporary issues associated with the environment of sports coaching. This unit challenges students by embracing a scenario/problem-based learning approach. Within this pedagogical model, students are required to develop solutions, with innovation and creativity, responding to the dynamic nature of the coaching environment. Students will be challenged to explore pedagogic, sociological, ethical, philosophical and entrepreneurial theory to respond to the challenges presented.

Students successfully completing the unit will have developed group working skills, presentation skills and be able to critically apply coaching theory into real-world scenarios, justifying their solutions to the problems being addressed. Problems and scenarios drawn from real-world scenarios could be drawn from contemporary issues in performance enhancement, athlete surveillance, funding streams, policy development and the emerging use of technology in sports performance.
Learning Outcomes

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

1. Produce innovative and creative solutions to contemporary issues in coaching
2. Assess the application of theory in solving real-world coaching problems/scenarios
3. Review the history of coaching policy nationally and internationally
4. Evaluate contemporary issues surrounding sports coaching.
Essential content

LO1 Produce innovative and creative solutions to contemporary issues in coaching

Group dynamics:
Phases of group formation
Change management
Contract formation and negotiation
Problem and scenario-based learning pedagogy

Strategy generation:
Leadership models and styles
Employability skills
Entrepreneurism

Contemporary issues in sports coaching:
Ethical practice
Safeguarding
Drugs
Deviance
Technology and sports performance
Athlete surveillance
Drop out and burn out
Sport for development
Competition ethics
Disability

LO2 Assess the application of theory in solving real-world coaching problems/scenarios

Contemporary coaching pedagogy:
Non-linear coaching
Transformational/transactional/servant leadership
Athlete wellbeing and long-term athlete health
Considering alternative strategies
Evaluating solutions
Debating concepts
Producing compelling presentations and solutions
Evidence-based practice

LO3 Review the history of coaching policy nationally and internationally

Coaching policy:
Government
National Governing Bodies
Olympic funding
Mega-events planning and legacy
Government ideologies
Talent pathways

International policy development:
Child protection
Competition
Mega events, e.g. Olympics, World Cup, etc.

LO4 Evaluate contemporary issues surrounding sports coaching

Policy history:
Government documentation
Umbrella organisations, e.g. Sports Coach UK, UK Sport, Canadian Sport 4 Life, Australian Institute of Sport
Sociological perspectives, e.g. sport for development, health, etc.

Contemporary issues:
Any number of topics could be included here in response to contemporary coaching challenges and emerging issues in sports coaching media.
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Produce innovative and creative solutions to contemporary issues in coaching</td>
<td><strong>LO1 &amp; LO2</strong> <strong>D1</strong> Critically evaluate relevant theoretical frameworks to produce an effective solution to a contemporary coaching problem</td>
<td></td>
</tr>
<tr>
<td><strong>P1</strong> Investigate the issues inherent in a contemporary coaching problem</td>
<td><strong>M1</strong> Evaluate a range of potential solutions to a contemporary coaching problem</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Discuss a solution to a contemporary coaching problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Assess the application of theory in solving real-world coaching problems/scenarios</td>
<td></td>
<td><strong>LO3 &amp; LO4</strong> <strong>D2</strong> Critically evaluate the contemporary landscape of coaching, both nationally and internationally, identifying how policy/theory has informed, shaped and challenged coaching development</td>
</tr>
<tr>
<td><strong>P3</strong> Discuss a relevant theory to underpin a solution to a coaching problem/scenario</td>
<td><strong>M2</strong> Evaluate a range of theories that could contribute to solving a coaching problem/scenario</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Review the strength of contemporary research underpinning coaching theory</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Review the history of coaching policy nationally and internationally</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P5</strong> Investigate policy changes and documents that have informed the history of sports coaching</td>
<td><strong>M3</strong> Evaluate the impact of a range of policy documents and strategies on the sports coaching environment and contemporary coaching practice</td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Examine the impact of one government policy document or strategy on sports coaching environments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: LO = Learning Outcome, P = Pass, M = Merit, D = Distinction*
<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO4</strong> Evaluate contemporary issues surrounding sports coaching</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P7</strong> Evaluate the challenges facing contemporary sports coaching environments</td>
<td><strong>M4</strong> Explore the challenges and issues most pertinent in a personal coaching environment</td>
<td></td>
</tr>
<tr>
<td><strong>P8</strong> Review literature surrounding contemporary issues, identifying strengths and weaknesses in research</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
www.uksport.gov.uk UK Sport
Resources
General Reference
www.gov.uk Government Policy
Department of Culture Media and Sport
Research and general reference
sportforlife.ca Canadian Sport for Life
Resources
Research and general reference

Links
This unit links to the following related units:
Unit 5: Coaching Practice & Skill Development
Unit 34: Innovation in Coaching.
Unit 36: Applied Lifestyle Coaching

<table>
<thead>
<tr>
<th>Unit code</th>
<th>M/616/1702</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

Introduction

Lifestyle coaching involves a professional relationship which facilitates an individual’s or group’s performance, health and personal development. It is a profession which is becoming increasingly recognised throughout the world. The lifestyle coach works with clients to help them achieve what they want from life and empowers the client to take positive actions towards achieving those goals. Lifestyle coaching is future- and action-orientated.

The aim of this unit is to provide students with the requisite practical knowledge and understanding of lifestyle coaching. Students will familiarise themselves with client assessment and creative and diagnostic skills. They will learn about the cognitive approach to coaching and learn about the principles that underpin a professional coaching session.

This unit will enable students to gain essential skills in coaching, goal setting, monitoring reviewing and accountability. It will focus on empowering clients to improve in the areas of personal and professional development. Students will learn about coaching models of practice with an emphasis on developing emotional intelligence through the use of various techniques. The unit will also enable students to take part in observed coaching sessions. The emphasis will be on developing a coaching relationship through effective communication with the use of powerful questioning to help clients build self-awareness. Accurate note taking, record-keeping and self-evaluation will be essential components of these sessions.

On completion of this unit, students will have a thorough knowledge of how to plan, implement, monitor and evaluate life coaching sessions for an individual from any population or group. The student will have a knowledge of ethics for life coaching practice.
Learning Outcomes

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

1. Demonstrate an initial assessment of a client
2. Exhibit diagnostic and creative skills showing knowledge of core competencies
3. Demonstrate a cognitive approach to coaching
4. Plan and implement a coaching session
Essential content

LO1  Demonstrate an initial assessment of a client

Sports coaching, life coaching, mentoring, psychotherapy and counselling:

The importance of co-creating a client-coach relationship, the range of the contractual relationship, e.g. practical arrangements and responsibilities. Characteristics of a contract, relevant legislation, ethics and confidentiality and practical issues

Planning of coaching sessions, coaching agreement, detailed plan of the session, highlight areas of self-discovery

Follow-up and how to plan for the next session

Key professional standards of the International Coaching Federation ICF code of ethics. Coaching agreement and relevant coaching process

LO2  Exhibit diagnostic and creative skills showing knowledge of core competencies

Setting a foundation, co-creating a relationship, communicating effectively, facilitating learning and results

Coaching presence. Create a safe and supportive environment. Establish trust and intimacy through professional and ethical behaviour

Methods of self-care for both client and coach. Methods, practices and value of self-care

Explore different methods of mindfulness for both the client and coach and incorporate these into daily practice. Engage in self-reflection and evaluation of the benefits of mindfulness techniques

Demonstrate skilful and effective communication through powerful questioning. Establish permission from client to ask seeking questions and provide a clear rationale for the client as to the purpose of this. Demonstrate skills in interpreting verbal and non-verbal communication

Perform appropriate analysis in interpreting situations and take appropriate ethical decisions where necessary
LO3 **Demonstrate a cognitive approach to coaching**

Motivational theory, self-determination, theory, stress and anxiety management, challenge and threat states.

Broader perspectives for clients. Motivate and inspire, contemplate new possibilities for action. Neuroplasticity

Interpretations, new possibilities identify feelings, actions and learned behaviours

Coaching methods, challenge learned behaviour, alter beliefs, perceptions, and moods. Distinguish between destructive and constructive habits

Client potential, set new goals, new behavioural responses, methods for change, vision for the future

LO4 **Plan and implement a coaching session**

Role of the client and coach, accountability, responsibility and ethical issues.

Importance of the client’s commitment to the process

Implement, monitor and evaluate a development plan

Change during the coaching process. Link sessions, behavioural patterns

Reflective practice, self-appraisal, the importance of self-awareness

Client and coach responsibilities, accountability for both parties. Praise and independence

Effectiveness of the original consultation plan, outcomes, improvement
<table>
<thead>
<tr>
<th>Learning Outcomes and Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pass</strong></td>
</tr>
<tr>
<td><strong>LO1</strong> Demonstrate initial assessment of a client</td>
</tr>
<tr>
<td>P1 Explore the term ‘life coach’.</td>
</tr>
<tr>
<td>P2 Research the ethical issues that may arise during a life coaching session</td>
</tr>
<tr>
<td><strong>LO2</strong> Exhibit diagnostic and creative skills showing knowledge of core competencies</td>
</tr>
<tr>
<td>P3 Perform appropriate analysis of a client and make appropriate recommendations</td>
</tr>
<tr>
<td>P4 Review a coaching session and make appropriate recommendations for future goals</td>
</tr>
<tr>
<td><strong>LO3</strong> Demonstrate a cognitive approach to coaching</td>
</tr>
<tr>
<td>P5 Demonstrate the ability to go beyond what the client says, read behind the lines, and identify feelings, actions and learned behaviours</td>
</tr>
<tr>
<td>P6 Demonstrate a number of different coaching methods</td>
</tr>
<tr>
<td><strong>LO4</strong> Plan and implement a coaching session</td>
</tr>
<tr>
<td>P7 Present a detailed plan for a client based on a scenario</td>
</tr>
<tr>
<td>P8 Identify your role and responsibilities as a lifestyle coach</td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks

Websites
Lifecoaching.com
www.animascoaching.com

Links
This unit links to the following related units:
Unit 4: Professional Skills
Unit 5: Coaching Practice & Skill Development
Unit 7: Physical Activity Lifestyle & Health
Unit 8: Lifestyle Coaching
Unit 20: Health Community Engagement.
Unit 37: Sport Rehabilitation

<table>
<thead>
<tr>
<th>Unit code</th>
<th>T/616/1703</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit level</td>
<td>5</td>
</tr>
<tr>
<td>Credit value</td>
<td>15</td>
</tr>
</tbody>
</table>

**Introduction**

Sport rehabilitation is the process that assesses an athlete’s injury and forms a strategy that will safely return the athlete to their sport. This strategy is used to prepare the body for a return to sport, reduce the injury and promote the prevention of any further injuries. Additionally, sport rehabilitation utilises a wide range of techniques that will promote and enhance the recovery of the athlete’s psychological and physiological state.

It will provide students with an opportunity to consider the pathology of musculoskeletal injuries and the implementation of rehabilitation strategies. Throughout this unit, students will explore different types of assessment and treatment, as well as the writing of a sport rehabilitation programme. Students will be encouraged to link their musculoskeletal knowledge to all the learning outcomes while considering the effectiveness of the sport rehabilitation programme.

Students will have the opportunity to consider the psychological rehabilitation that may be required for an athlete to recover fully from their injury. Furthermore, they will incorporate the nutritional knowledge that would enhance their athlete’s recovery. Students will investigate specific sporting movements and the considerations of the different modalities utilised for sports injuries. Once completed, students will be provided with the opportunity to design and evaluate a sport rehabilitation programme and demonstrate sessions from it.

On completion of this unit, students will be able to produce a sport rehabilitation programme that investigates the pathology of injuries, while assessing the different types of athlete assessment and rehabilitation technique. Furthermore, students will be able to consider the psychological and nutritional elements of rehabilitation, while evaluating the effectiveness of sport rehabilitation programmes. The aim of this unit is to provide students with an insight into both sports therapy and the strength and conditioning sector. This unit delivers the theoretical, strategical and practical knowledge that is required for students to progress onto sports therapy or strength and conditioning courses.
Learning Outcomes

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

1. Investigate the pathology of musculoskeletal injuries
2. Assess the different types of athlete assessment and rehabilitation techniques
3. Design a sport rehabilitation programme for a specific sporting injury
4. Evaluate the sport rehabilitation programme for a specific sporting injury.
Essential content

LO1 Investigate the pathology of musculoskeletal injuries

Types of injuries:
Fractures, osteoporosis, arthritis, tendon/ligament tears, muscular dystrophy, muscular strains and tears
Severity, tear grading, type of fractures, severity of arthritis and osteoporosis

Intrinsic pathologies:
Overuse, muscular imbalance, overtraining, fitness level, lack of strength and/or flexibility, decision-making, incorrect technique

Extrinsic pathologies:
Opponents, terrain/surface, equipment, weather, coaches, officials

Sporting movement:
Uni-lateral, bi-lateral, linear, rotational movements, motor skills
Joint movements, flexion, extension, hyperextension, rotation, circumduction

LO2 Assess the different types of client assessment and rehabilitation techniques

Types of modalities:
Zinc oxide tape, K-tape, walking aids, cryo-cuff, limp supports

Types of treatment:
Hydrotherapy, strength and conditioning, electrotherapy, sports massage, nitrogen and oxygen chambers, cryotherapy, foam rolling

Effective use of assessments:
X-ray, MRI scan, joint assessments, clearing joints, PRICED and SALTAPS, strength and flexibility testing of relevant muscles

Injections for rehabilitation:
Effects of injections as temporary treatment, cortisone, hyaluronan, corticosteroid, local anaesthetic, consideration of non-injected medications
LO3  Design a sport rehabilitation programme for a specific sporting injury

Stages and Phases:
Strength and conditioning, electrotherapy, use of chambers, cold treatments, resistance equipment, plyometric, stretching, ongoing treatments, hydrotherapy, cardio sessions, rest

Client assessments:
Scans, clearing of joints, use of SALTAPS and PRICED

Physical examinations:
Palpation, resistance tests, flexibility test, e.g. slump tests, Thomas test

Movement patterns:
Uni-lateral, bi-lateral, linear, rotational movements, motor skills

Psychological concepts (training movement not muscles):
Psychological rehabilitation, relapse, social support, coping strategies

Nutrition benefits:
Protein for repair, weight maintenance, support strengthening and size training

LO4 Evaluate the sport rehabilitation programme for the specific sporting injury

Amateur versus elite athletes:
Linked to sports-specific movements, exercises and treatments used to rehabilitate the injury, equipment available

Consideration of movement patterns:
Uni-lateral, bi-lateral, linear, rotational movements, motor skills

Psychological support:
Consideration of athlete profile, confidence levels, mental insecurities, importance to the sport or team
**Effectiveness:**

Stages and phases covered sufficiently
Rehabilitation techniques meet the need of the sport and the particular athlete
Psychological progression
Nutritional information that enhances the athlete's recovery
### Learning Outcomes and Assessment Criteria

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Distinction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1</strong> Investigate the pathology of musculoskeletal injuries</td>
<td><strong>M1</strong> Compare the pathology of different musculoskeletal injuries</td>
<td><strong>D1</strong> Analyse the interrelationship between intrinsic and extrinsic pathologies</td>
</tr>
<tr>
<td><strong>P1</strong> Illustrate the pathology of musculoskeletal injuries</td>
<td><strong>M2</strong> Evaluate the key sporting movements that contribute to musculoskeletal injuries</td>
<td></td>
</tr>
<tr>
<td><strong>P2</strong> Assess the pathology of sports injuries to the knee</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO2</strong> Assess the different types of client assessment and rehabilitation techniques</td>
<td><strong>M3</strong> Analyse the impact different modalities can have on the human body</td>
<td><strong>D2</strong> Discuss the interrelationship between the different rehabilitation techniques</td>
</tr>
<tr>
<td><strong>P3</strong> Explore different types of client assessment</td>
<td><strong>M4</strong> Assess the risk of injected medication provided for sports injuries</td>
<td></td>
</tr>
<tr>
<td><strong>P4</strong> Investigate the different rehabilitation techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO3</strong> Design a sport rehabilitation programme for a specific sporting injury</td>
<td><strong>M5</strong> Justify the progression through the stages of rehabilitation within the programme</td>
<td><strong>D3</strong> Suggest how the rehabilitation programme meets the requirements of different sports</td>
</tr>
<tr>
<td><strong>P5</strong> Compose a sport rehabilitation programme for a specific sporting injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P6</strong> Demonstrate athlete assessment and a rehabilitation session for a specific sporting injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>LO4</strong> Evaluate the sport rehabilitation programme for the specific sporting injury</td>
<td><strong>M6</strong> Suggest how the rehabilitation session may differ for elite level athletes</td>
<td><strong>D4</strong> Critically evaluate the effectiveness of the rehabilitation programme</td>
</tr>
<tr>
<td><strong>P7</strong> Justify the athlete assessment techniques used for the specific sporting injury</td>
<td><strong>M7</strong> Analyse how the rehabilitation programme links to specific sporting movements</td>
<td></td>
</tr>
<tr>
<td><strong>P8</strong> Evaluate the rehabilitation session for a specific sporting injury</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recommended resources

Textbooks


Websites
www.sportsinjuryclinic.net  Sports Injury Clinic
Rehabilitation & Exercises
General Reference

www.k4sportsrehab.co.uk  K4 Sports Rehabilitation
Injury Rehab & Massage
General Reference

Links
This unit links to the following related units:
*Unit 3: Anatomy & Physiology*
*Unit 9: Biomechanics*
*Unit 11: Injury Prevention*
*Unit 12: Community Coaching*
*Unit 13: Sports Massage*
*Unit 26: Exercise Physiology*
*Unit 33: Strength & Conditioning for Coaching.*
11 Appendices
Appendix 1: Mapping of HND in Sport & Exercise Science against FHEQ Level 5

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KU</td>
<td>Knowledge and Understanding</td>
</tr>
<tr>
<td>CS</td>
<td>Cognitive Skills</td>
</tr>
<tr>
<td>AS</td>
<td>Applied Skills</td>
</tr>
<tr>
<td>TS</td>
<td>Transferable Skills</td>
</tr>
</tbody>
</table>

The qualification will be awarded to students who have demonstrated:

<table>
<thead>
<tr>
<th>FHEQ Level 5 descriptor</th>
<th>Sport HND Programme Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and critical understanding of the well-established principles of their area(s) of study, and of the way in which those principles have developed</td>
<td><strong>KU1</strong> A critical understanding of the evolving concepts, theories and models within the study of sport across a range of practical and hypothetical scenarios.</td>
</tr>
<tr>
<td></td>
<td><strong>KU2</strong> An appreciation of the concepts and principles of CPD, staff development, leadership and reflective practice as methods and strategies for personal and people development.</td>
</tr>
<tr>
<td></td>
<td><strong>KU3</strong> Explain the basic principles of sport and exercise science in relation to sport and exercise therapy.</td>
</tr>
<tr>
<td></td>
<td><strong>KU4</strong> Explain the fundamental principles of physiology of exercise, sport psychology and biomechanics in relation to coaching and sport science.</td>
</tr>
<tr>
<td></td>
<td><strong>KU5</strong> Critically evaluate the skills and knowledge required to coach and teach effectively</td>
</tr>
<tr>
<td></td>
<td><strong>KU6</strong> Discuss awareness of current thinking on provision, practice, and the environment in which sport scientists operate within a coaching context.</td>
</tr>
<tr>
<td></td>
<td><strong>AS1</strong> Understand the moral, ethical and safety issues of working in a sports environment</td>
</tr>
<tr>
<td>FHEQ Level 5 descriptor</td>
<td>Sport HND Programme Outcome</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context</td>
<td>AS2 Evidence the ability to show client relationship management and develop appropriate policies and strategies to meet stakeholder expectations.</td>
</tr>
<tr>
<td></td>
<td>KU7 Identify, select and apply appropriate research within professional contexts</td>
</tr>
<tr>
<td></td>
<td>TS1 Apply numerical and statistical skills to problems</td>
</tr>
<tr>
<td></td>
<td>AS3 Develop outcomes for clients using appropriate practices and data to make justified recommendations.</td>
</tr>
<tr>
<td></td>
<td>TS2 Conduct an in depth research project, demonstrating the use of autonomous research skills, from a range of Sport and Development sources and research methods</td>
</tr>
<tr>
<td></td>
<td>TS3 Display competence in a variety of laboratory practical and coaching techniques</td>
</tr>
<tr>
<td>Knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study.</td>
<td>CS1 Research and assess subject specific facts, theories, paradigms, principles and concepts</td>
</tr>
<tr>
<td></td>
<td>CS2 Synthesise relevant literature to research, manage and produce a dissertation/project with the support of a supervisor</td>
</tr>
<tr>
<td></td>
<td>KU8 Examine the underpinning knowledge related to the validity and reliability of research within coaching and sport science.</td>
</tr>
<tr>
<td></td>
<td>CS3 Evidence investigative skills</td>
</tr>
<tr>
<td>An understanding of the limits of their knowledge, and how this influences analysis and interpretations based on that knowledge.</td>
<td>TS4 Self-reflection, including self-awareness; the ability to become an effective self-student and appreciate the value of the self-reflection process.</td>
</tr>
<tr>
<td></td>
<td>TS5 Undertake independent learning to expand on own skills and delivered content.</td>
</tr>
<tr>
<td>FHEQ Level 5 descriptor</td>
<td>Sport HND Programme Outcome</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis.</td>
<td>TS6 Competently use digital literacy to access a broad range of research sources, data and information.</td>
</tr>
<tr>
<td>CS4 Interpret, analyse and evaluate a range of data, sources and information to inform evidence-based decision-making.</td>
<td></td>
</tr>
<tr>
<td>CS5 Reflect on decisions taken and be able to propose alternative and appropriate courses of action</td>
<td></td>
</tr>
<tr>
<td>CS6 Synthesise knowledge and critically evaluate strategies and plans to understand the relationship between theory and real-world scenarios.</td>
<td></td>
</tr>
<tr>
<td>Effectively communicate information, arguments and analysis in a variety of forms to Specialist and non-Specialist audiences, and deploy key techniques of the discipline effectively.</td>
<td>TS7 Communicate confidently and effectively, both orally and in writing, both internally and externally with organisations and other stakeholders.</td>
</tr>
<tr>
<td>AS4 Locate, receive and respond to a variety of information sources (e.g. textual, numerical, graphical and computer-based) in defined contexts.</td>
<td></td>
</tr>
<tr>
<td>TS8 Display proficiency using a range of I.T. software</td>
<td></td>
</tr>
<tr>
<td>KU9 Define and explain key concepts related to behaviour change, exercise referral and corrective exercise</td>
<td></td>
</tr>
<tr>
<td>KU10 Articulate and critically evaluate the key research paradigms and methodologies for a variety of enquiries into Sport and Development, and to interpret and create knowledge in the field</td>
<td></td>
</tr>
<tr>
<td>KU11 Interpret, summarise and communicate appropriate sport-specific coaching theory research</td>
<td></td>
</tr>
<tr>
<td>KU12 Describe and discuss a range of variables relating to health, fitness, nutrition and client assessment</td>
<td></td>
</tr>
<tr>
<td>TS9 Take advantage of available pathways for continuing professional development through higher education, Professional Body Qualifications and National Governing Body Certifications.</td>
<td></td>
</tr>
<tr>
<td>TS10 Apply awareness of health and safety issues whilst working in coaching and laboratory based settings.</td>
<td></td>
</tr>
<tr>
<td>FHEQ Level 5 descriptor</td>
<td>Sport HND Programme Outcome</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>The qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making.</td>
<td>TS11 Develop a range of skills to ensure effective team working, independent initiatives, organisational competence and problem-solving strategies.</td>
</tr>
<tr>
<td></td>
<td>TS12 Show an ability to work as a member of a team, recognising the different roles within a team and the different ways of organising teams</td>
</tr>
<tr>
<td></td>
<td>TS13 Reflect adaptability and flexibility in approach to work; showing resilience under pressure and meeting challenging targets within given deadlines.</td>
</tr>
<tr>
<td></td>
<td>TS14 Use quantitative skills to manipulate data, evaluate and verify existing theory.</td>
</tr>
<tr>
<td></td>
<td>TS15 Manage small to medium scale projects using appropriate planning and time management techniques.</td>
</tr>
<tr>
<td></td>
<td>TS16 Display emotional intelligence and sensitivity to diversity in relation to people and cultures.</td>
</tr>
<tr>
<td></td>
<td>AS5 Plan, design and execute appropriate practical activities using suitable techniques and procedures, with due regard for safety, ethics and risk assessment</td>
</tr>
<tr>
<td></td>
<td>CS7 Apply the principles and variables of fitness to design a sport-specific training programme</td>
</tr>
</tbody>
</table>
## Appendix 2: HNC/HND Sport & Exercise Science Programme Outcomes for Students

<table>
<thead>
<tr>
<th>Unit</th>
<th>Knowledge and Understanding</th>
<th>Cognitive skills</th>
<th>Applied skills</th>
<th>Transferable skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>10</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>11</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>12</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>14</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>15</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Unit</td>
<td>Knowledge and Understanding</td>
<td>Cognitive skills</td>
<td>Applied skills</td>
<td>Transferable skills</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>17</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>18</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>19</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>20</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>21</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>22</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>23</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>24</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>25</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>26</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>27</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>28</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>29</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>30</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>31</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>32</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>33</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>34</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>35</td>
<td>X X X X X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
<td>X X X X X X X X X</td>
</tr>
<tr>
<td>Knowledge and Understanding</td>
<td>Cognitive skills</td>
<td>Applied skills</td>
<td>Transferable skills</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>Unit 36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11 12</td>
<td></td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td>X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td>X X X X X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X X X X X X X X X X X X X X</td>
<td></td>
<td>X X X X X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Appendix 3: Glossary of terms used for internally assessed units

This is a summary of the key terms used to define the requirements within units.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
</table>
| Analyse      | Present the outcome of methodical and detailed examination either:  
  - breaking down a theme, topic or situation in order to interpret and study the interrelationships between the parts and/or  
  - of information or data to interpret and study key trends and interrelationships.  
  
  Analysis can be through activity, practice, written or verbal presentation. |
| Apply        | Put into operation or use.  
  Use relevant skills/knowledge/understanding appropriate to context.                                                          |
| Arrange      | Organise or make plans.                                                                                                                                                                                  |
| Assess       | Offer a reasoned judgement of the standard/quality of a situation or a skill informed by relevant facts.                                                                                                    |
| Calculate    | Generate a numerical answer with workings shown.                                                                                                                                                          |
| Compare      | Identify the main factors relating to two or more items/situations or aspects of a subject that is extended to explain the similarities, differences, advantages and disadvantages.  
  
  This is used to show depth of knowledge through selection of characteristics.                                                  |
| Compose      | Create or make up or form.                                                                                                                                                                                |
| Communicate  | Convey ideas or information to others.  
  Create/construct skills to make or do something, for example a display or set of accounts.                                                                                                               |
<p>| Create/      | Skills to make or do something, for example, a display or set of accounts.                                                                                                                               |
| Construct    |                                                                                                                                                                                                           |
| Critically    | Separate information into components and identify characteristics with depth to the justification.                                                                                                |
| analyse      |                                                                                                                                                                                                           |
| Critically    | Make a judgement taking into account different factors and using available knowledge/experience/evidence where the judgement is supported in depth.                                                              |
| evaluate     |                                                                                                                                                                                                           |
| Define       | State the nature, scope or meaning.                                                                                                                                                                         |
| Describe     | Give an account, including all the relevant characteristics, qualities and events.                                                                                                                          |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss</td>
<td>Consider different aspects of a theme or topic, how they interrelate, and the extent to which they are important.</td>
</tr>
<tr>
<td>Demonstrate</td>
<td>Show knowledge and understanding.</td>
</tr>
<tr>
<td>Design</td>
<td>Plan and present ideas to show the layout/function/workings/object/system/process.</td>
</tr>
<tr>
<td>Develop</td>
<td>Grow or progress a plan, ideas, skills and understanding</td>
</tr>
<tr>
<td>Differentiate</td>
<td>Recognise or determine what makes something different.</td>
</tr>
<tr>
<td>Discuss</td>
<td>Give an account that addresses a range of ideas and arguments.</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Work draws on varied information, themes or concepts to consider aspects, such as:</td>
</tr>
<tr>
<td></td>
<td>• strengths or weaknesses</td>
</tr>
<tr>
<td></td>
<td>• advantages or disadvantages</td>
</tr>
<tr>
<td></td>
<td>• alternative actions</td>
</tr>
<tr>
<td></td>
<td>• relevance or significance.</td>
</tr>
<tr>
<td></td>
<td>Students’ inquiries should lead to a supported judgement showing relationship to its context. This will often be in a conclusion. Evidence</td>
</tr>
<tr>
<td></td>
<td>will often be written but could be through presentation or activity.</td>
</tr>
<tr>
<td>Explain</td>
<td>To give an account of the purposes or reasons.</td>
</tr>
<tr>
<td>Explore</td>
<td>Skills and/or knowledge involving practical research or testing.</td>
</tr>
<tr>
<td>Identify</td>
<td>Indicate the main features or purpose of something by recognising it and/or being able to discern and understand facts or qualities.</td>
</tr>
<tr>
<td>Illustrate</td>
<td>Make clear by using examples or provide diagrams.</td>
</tr>
<tr>
<td>Indicate</td>
<td>Point out, show.</td>
</tr>
<tr>
<td>Interpret</td>
<td>State the meaning, purpose or qualities of something through the use of images, words or other expression.</td>
</tr>
<tr>
<td>Investigate</td>
<td>Conduct an inquiry or study into something to discover and examine facts and information.</td>
</tr>
<tr>
<td>Justify</td>
<td>Students give reasons or evidence to:</td>
</tr>
<tr>
<td></td>
<td>• support an opinion</td>
</tr>
<tr>
<td></td>
<td>• prove something is right or reasonable.</td>
</tr>
<tr>
<td>Outline</td>
<td>Set out the main points/characteristics.</td>
</tr>
<tr>
<td>Plan</td>
<td>Consider, set out and communicate what is to be done.</td>
</tr>
<tr>
<td>Produce</td>
<td>To bring into existence.</td>
</tr>
<tr>
<td>Reconstruct</td>
<td>To assemble again/reorganise/form an impression.</td>
</tr>
</tbody>
</table>

Pearson BTEC Levels 4 and 5 Higher Nationals in Sport & Exercise Science Specification – Issue 2 – April 2020 © Pearson Education Limited 2020
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report</td>
<td>Adhere to protocols, codes and conventions where findings or judgements are set down in an objective way.</td>
</tr>
</tbody>
</table>
| Review             | Make a formal assessment of work produced. The assessment allows students to:  
|                    | • appraise existing information or prior events  
|                    | • reconsider information with the intention of making changes, if necessary.                                                                |
| Show how           | Demonstrate the application of certain methods/theories/concepts.                                                                           |
| Stage and manage   | Organisation and management skills, for example, running an event or a Sport pitch.                                                           |
| State              | Express.                                                                                                                                   |
| Suggest            | Give possible alternatives, produce an idea, put forward, for example, an idea or plan, for consideration.                                    |
| Undertake/carry out| Use a range of skills to perform a task, research or activity.                                                                               |
This is a key summary of the types of evidence used for BTEC Higher Nationals:

<table>
<thead>
<tr>
<th>Type of evidence</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case study</td>
<td>A specific example to which all students must select and apply knowledge.</td>
</tr>
<tr>
<td>Project</td>
<td>A large scale activity requiring self-direction of selection of outcome, planning, research, exploration, outcome and review.</td>
</tr>
<tr>
<td>Independent research</td>
<td>An analysis of substantive research organised by the student from secondary sources and, if applicable, primary sources.</td>
</tr>
<tr>
<td>Written task or report</td>
<td>Individual completion of a task in a work-related format, for example, a report, marketing communication, set of instructions, giving information.</td>
</tr>
<tr>
<td>Simulated activity/role play</td>
<td>A multi-faceted activity mimicking realistic work situations.</td>
</tr>
<tr>
<td>Team task</td>
<td>Students work together to show skills in defining and structuring activity as a team.</td>
</tr>
<tr>
<td>Presentation</td>
<td>Oral or through demonstration.</td>
</tr>
<tr>
<td>Production of plan/business plan</td>
<td>Students produce a plan as an outcome related to a given or limited task.</td>
</tr>
<tr>
<td>Reflective journal</td>
<td>Completion of a journal from work experience, detailing skills acquired for employability.</td>
</tr>
<tr>
<td>Poster/leaflet</td>
<td>Documents providing well-presented information for a given purpose.</td>
</tr>
</tbody>
</table>
# Appendix 4: Assessment methods and techniques for Higher Nationals

<table>
<thead>
<tr>
<th>Assessment technique</th>
<th>Description</th>
<th>Transferable skills development</th>
<th>Formative or Summative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic graphic display</td>
<td>This technique asks students to create documents providing well-presented information for a given purpose. Could be a hard or soft copy.</td>
<td>Creativity, Written communication, Information and communications, Technology, Literacy</td>
<td>Formative, Summative</td>
</tr>
<tr>
<td>Case study</td>
<td>This technique present students with a specific example to which they must select and apply knowledge.</td>
<td>Reasoning, Critical thinking, Analysis</td>
<td>Formative, Summative</td>
</tr>
<tr>
<td>Discussion forum</td>
<td>This technique allows students to express their understanding and perceptions about topics and questions presented in the class or digitally, for example, online groups, blogs.</td>
<td>Oral/written communication, Appreciation of diversity, Critical thinking and reasoning, Argumentation</td>
<td>Formative</td>
</tr>
<tr>
<td>Assessment technique</td>
<td>Description</td>
<td>Transferable skills development</td>
<td>Formative or Summative</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Independent research</td>
<td>This technique is an analysis of research organised by the student from secondary sources and, if applicable, primary sources.</td>
<td>Information and communications technology</td>
<td>Formative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Literacy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analysis</td>
<td></td>
</tr>
<tr>
<td>Oral/Viva</td>
<td>This technique asks students to display their knowledge of the subject via questioning.</td>
<td>Oral communication</td>
<td>Summative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Critical thinking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reasoning</td>
<td></td>
</tr>
<tr>
<td>Peer review</td>
<td>This technique asks students to provide feedback on each other's performance. This feedback can be collated for development purposes.</td>
<td>Teamwork</td>
<td>Formative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaboration</td>
<td>Summative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negotiation</td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td>This technique asks students to deliver a project orally or through demonstration.</td>
<td>Oral communication</td>
<td>Formative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Critical thinking</td>
<td>Summative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reasoning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creativity</td>
<td></td>
</tr>
<tr>
<td>Assessment technique</td>
<td>Description</td>
<td>Transferable skills development</td>
<td>Formative or Summative</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>---------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Production of an artefact/performance or portfolio</td>
<td>This technique requires students to demonstrate that they have mastered skills and competencies by producing something. Some examples are [Sector] plans, using a piece of equipment or a technique, building models, developing, interpreting, and using maps.</td>
<td>Creativity, Interpretation, Written and oral communication, Interpretation, Decision-making, Initiative, Information and Communications, Technology, Literacy, etc.</td>
<td>Summative</td>
</tr>
<tr>
<td>Project</td>
<td>This technique is a large scale activity requiring self-direction, planning, research, exploration, outcome and review.</td>
<td>Written communication, Information, Literacy, Creativity, Initiative.</td>
<td>Summative</td>
</tr>
<tr>
<td>Assessment technique</td>
<td>Description</td>
<td>Transferable skills development</td>
<td>Formative or Summative</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Role playing</td>
<td>This technique is a type of case study, in which there is an explicit situation established, with students playing specific roles, understanding what they would say or do in that situation.</td>
<td>Written and oral communication</td>
<td>Formative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leadership</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information literacy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creativity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Initiative</td>
<td></td>
</tr>
</tbody>
</table>

| Self-reflection      | This technique asks students to reflect on their performance, for example, to write statements of their personal goals for the course at the beginning of the course, what they have learned at the end of the course and their assessment of their performance and contribution; completion of a reflective journal from work experience, detailing skills acquired for employability. | Self-reflection                                                       | Summative              |
|                      |                                                                                                                                                                                                             | Written communication                                                  |                        |
|                      |                                                                                                                                                                                                             | Initiative                                                             |                        |
|                      |                                                                                                                                                                                                             | Decision-making                                                       |                        |
|                      |                                                                                                                                                                                                             | Critical thinking                                                      |                        |

| Simulated activity   | This technique is a multi-faceted activity based on realistic work situations.                                                                                                                                | Self-reflection                                                       | Formative              |
|                      |                                                                                                                                                                                                             | Written communication                                                  |                        |
|                      |                                                                                                                                                                                                             | Initiative                                                             |                        |
|                      |                                                                                                                                                                                                             | Decision-making                                                       |                        |
|                      |                                                                                                                                                                                                             | Critical thinking                                                      |                        |

<p>|                      |                                                                                                                                                                                                             | Summative                                                             |                        |</p>
<table>
<thead>
<tr>
<th>Assessment technique</th>
<th>Description</th>
<th>Transferable skills development</th>
<th>Formative or Summative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team assessment</td>
<td>This technique asks students to work together to show skills in defining and structuring an activity as a team. All team assessment should be distributed equally, each of the group members performing their role, and then the team collates the outcomes, and submits it as a single piece of work.</td>
<td>Collaboration, Teamwork, Leadership, Negotiation, Written and oral communication</td>
<td>Formative Summative</td>
</tr>
<tr>
<td>Tiered knowledge</td>
<td>This technique encourages students to identify their gaps in knowledge. Students record the main points they have captured well and those they did not understand.</td>
<td>Critical thinking, Analysis, Interpretation, Decision-making, Oral and written communication</td>
<td>Formative</td>
</tr>
<tr>
<td>Time constrained assessment</td>
<td>This technique covers all assessment that needs to be done within a centre-specified time constrained period on-site.</td>
<td>Reasoning, Analysis, Written communication, Critical thinking, Interpretation</td>
<td>Summative</td>
</tr>
<tr>
<td>Assessment technique</td>
<td>Description</td>
<td>Transferable skills development</td>
<td>Formative or Summative</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>---------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Top ten</td>
<td>This technique asks students to create a ‘top ten’ list of key concepts presented in the assigned reading list.</td>
<td>Teamwork, Creativity, Analysis, Collaboration</td>
<td>Formative</td>
</tr>
<tr>
<td>Written task or report</td>
<td>This technique asks students to complete an assignment in a structured written format, for example, a [Sector] plan, a report, marketing communication, set of instructions, giving information.</td>
<td>Reasoning, Analysis, Written communication, Critical thinking, interpretation.</td>
<td>Summative</td>
</tr>
</tbody>
</table>
## Appendix 5: Transferable skills mapping

### Level 4 Higher National Certificate in Sport & Exercise Science: mapping of transferable employability and academic study skills

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Cognitive skills</th>
<th>Intra-personal Skills</th>
<th>Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problem-solving</td>
<td>Critical Thinking/Analysis</td>
<td>Decision-making</td>
</tr>
<tr>
<td>1</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>7</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>8</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>9</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>10</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>11</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Skill Set</td>
<td>Cognitive skills</td>
<td>Intra-personal Skills</td>
<td>Interpersonal Skills</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------</td>
<td>-----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plan Prioritise</td>
<td>Self-Management</td>
</tr>
<tr>
<td>12</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
## Level 5 Higher National Diploma in Sport & Exercise Science: mapping of transferable employability and academic study skills

<table>
<thead>
<tr>
<th>Skill Set</th>
<th>Cognitive skills</th>
<th>Intra-personal Skills</th>
<th>Interpersonal Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Plan Prioritise</td>
<td>Self-Management</td>
</tr>
<tr>
<td>14</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>15</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>16</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>17</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>18</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>19</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>20</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>21</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>22</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>23</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>24</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>25</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>26</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>27</td>
<td>X X X X</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>Skill Set</td>
<td>Cognitive skills</td>
<td>Intra-personal Skills</td>
<td>Interpersonal Skills</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
<td>----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Unit</td>
<td>Problem-solving</td>
<td>Critical Thinking/Analysis</td>
<td>Decision-making</td>
</tr>
<tr>
<td>28</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>29</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>30</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>31</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>32</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>33</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>34</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>35</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>36</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>37</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Appendix 6: Subject Benchmarks

Subject benchmark statement – Events, Hospitality, Leisure, Sports & Tourism

(i) Leisure programmes

An Honours graduate in Leisure will be able to understand, critically evaluate and reflect on issues of lifestyle, consumption and culture as they affect people's leisure lives, including being able to:

- demonstrate an ability to synthesise interdisciplinary approaches to issues of consumption and consumerism in leisure markets
- critically reflect on the impact of leisure in the lives of individuals and analyse barriers to participation
- evaluate the importance of cultural and other diversities in developing access to participation in leisure by specific target groups.

An Honours graduate in Leisure will be able to understand the social, political, economic and physical contexts of leisure and analyse the impact of these upon leisure theories, including being able to:

- critically evaluate the notion of praxis derived from generic disciplines and apply these to a specific leisure context
- analyse and reflect upon the environment in which leisure operations take place
- review and analyse the political and economic factors which affect the supply of, and demands for, leisure
- critically reflect on the nature of policies for leisure across sectoral and administrative boundaries
- critically evaluate the role and impact of global and local leisure structures and organisations.

An Honours graduate in Leisure will be able to utilise and understand the impact of rationales, sources and assumptions embedded in policy, planning and delivery mechanisms in a leisure context, including being able to:

- operationalise concepts of social, public and business policy and critically analyse their role in leisure supply
- write and critically evaluate leisure plans, development plans and recognise and meet the leisure needs of specific communities
- critically reflect upon the role of those organisations and structures charged with a responsibility for the promotion of leisure or the training of practitioners in leisure.
An Honours graduate in Leisure will be able to employ a range of 'leisure specific' facilitation skills in the promotion of professional practice, including being able to:

- critically reflect upon what it means to work in leisure
- evaluate the impact and role of leisure events in everyday life
- demonstrate the skills necessary both to deliver and reflect upon a leisure experience aimed at a specific group, for example an event or a competition.

(ii) **Sport programmes**

Programmes of study are orientated towards the scientific, cultural or management-based approaches to the study of sport. The design of programmes, including the selection of learning outcomes, subject content and experiential learning will reflect this. Institutions will demonstrate that a programme of study has adequate coverage of one or more of the following five study areas, along with the learning experiences necessary to achieve the specific graduate outcomes. Degrees incorporating the term *Sport studies* will normally be expected to embrace two or more of the five study areas below.

1. The study of human responses to sport and exercise, including:
   - making effective use of knowledge and understanding of the disciplines underpinning human structure and function
   - appraising and evaluating the effects of sport and exercise intervention on the participant
   - showing evidence of the skills required to monitor and evaluate human responses to sport and/or exercise
   - providing a critical appreciation of the relationship between sport and exercise activity and intervention in a variety of participant groups, this could include special populations such as senior citizens, disabled people and children.

2. The study of the performance of sport and its enhancement, monitoring and analysis, including:
   - monitoring, analysing, diagnosing and prescribing action to enhance the learning and performance of the component elements of sport
   - showing evidence of the skills required to monitor and evaluate sports performance in laboratories and/or field settings
   - displaying a critical appreciation of the integration of the variables involved in the delivery (teaching, instructing and coaching) of enhanced sport performance.
3. The study of health-related and disease management aspects of exercise and physical activity, including:
   - displaying an awareness of current government policy on disease prevention and the relevance of exercise
   - showing evidence of an ability to monitor health through exercise and prescribe appropriate interventions
   - displaying a broad range of skills, including awareness of health and safety, ethical considerations, exercise prescription, population differences and the role of education, health and sports bodies in improving the health of the nation.

4. The study of the historical, social, political, economic and cultural diffusion, distribution and impact of sport, including:
   - displaying a critical insight into the organisations and structures responsible for sport, and the political ramifications arising from these
   - employing social, economic and political theory to explain the development and differentiation of sport throughout society
   - demonstrating the application of the social and cultural meanings attached to sport and their impact on participation and regulation.

5. The study of the policy, planning, management and delivery of sporting opportunities, including:
   - understanding and applying the theories, concepts and principles of practice from the generic management areas of operations, finance, human resources, economics and marketing to sports facilities and events
   - employing strategic planning and development planning skills in analysing, understanding and addressing the development needs and intentions of sport organisations and communities
   - demonstrating a critical appreciation of sport development and facilitation principles in at least one vocational context.

(iii) Leisure-related award titles

Adventure recreation, adventurous activities, countryside leisure management, entertainment management, facilities management, international leisure management, international leisure marketing, leisure administration, leisure and licensed retail, leisure and recreation, leisure economics, leisure events and entertainment management, leisure events management, leisure marketing, leisure property, leisure studies, management in equine leisure, maritime leisure management, outdoor activities, and outdoor recreation.
(iv) Sport-related award titles

Coaching studies, community sport, exercise physiology, exercise science, exercise studies, exercise therapy, fitness science, fitness studies, health and fitness management, movement science, movement studies, outdoor studies, physical education (non-qualified teacher status), recreation management, sport and exercise sciences, sport and the media, sport education, sports coaching, sports development, sports economics, sports injury/therapy, sports management, sports performance analysis, sports psychology, sports science, including the science of specific sports, for example football science, sports studies, sports technology, and sports tourism management.
### Appendix 7: Recognition of Prior Learning

**QCF Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science mapped to the RQF Pearson BTEC Level 4 Higher National Certificate in Sport & Exercise Science**

### Unit Mapping Overview

This mapping document is designed to support centres who wish to recognise student achievement in older QCF Higher Nationals within the new RQF suites. The document demonstrates where content is covered in the new suite, and where there is new content to cover to ensure full coverage of learning outcomes.

- **P** – Partial mapping (some topics from the old unit appear in the new unit)
- **X** – Full mapping + new (all the topics from the old unit appear in the new unit, but new unit also contains new topic(s))
- **N** – New unit

<table>
<thead>
<tr>
<th>Unit no.</th>
<th>Unit title New RQF HN programme</th>
<th>Maps to unit number on existing QCF HN programme</th>
<th>Level of similarity between units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nutrition</td>
<td>6</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>2</td>
<td>Fundamentals of Sport &amp; Exercise Psychology</td>
<td>2</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>3</td>
<td>Engineering Science</td>
<td>1</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>4</td>
<td>Professional Skills</td>
<td>3</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>5</td>
<td>Coaching Practice &amp; Skill Development</td>
<td>9, 10</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>6</td>
<td>Training, Fitness, Testing</td>
<td>57</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>7</td>
<td>Physical Activity, Lifestyle &amp; Health</td>
<td>21</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>8</td>
<td>Lifestyle Coaching</td>
<td></td>
<td><strong>N</strong></td>
</tr>
<tr>
<td>9</td>
<td>Biomechanics</td>
<td>4</td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>10</td>
<td>Technology in Sport</td>
<td>32</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>11</td>
<td>Injury Prevention</td>
<td>26</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>12</td>
<td>Community Coaching</td>
<td></td>
<td><strong>N</strong></td>
</tr>
<tr>
<td>13</td>
<td>Sports Massage</td>
<td>30</td>
<td><strong>P</strong></td>
</tr>
<tr>
<td>RQF HNC Units</td>
<td>QCF HNC units</td>
<td>Mapping comments</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>RQF unit title</td>
<td>No</td>
<td>QCF unit title</td>
</tr>
<tr>
<td>1</td>
<td>Nutrition</td>
<td>6</td>
<td>Nutrition for Sport and Exercise</td>
</tr>
<tr>
<td>2</td>
<td>Fundamentals of Sport &amp; Exercise Psychology</td>
<td>2</td>
<td>Sport and Exercise Psychology</td>
</tr>
<tr>
<td>3</td>
<td>Anatomy &amp; Physiology</td>
<td>1</td>
<td>Anatomy and Physiology for Sport and Exercise</td>
</tr>
<tr>
<td>4</td>
<td>Professional Skills</td>
<td>3</td>
<td>Research Methods for Sport and Exercise Science</td>
</tr>
<tr>
<td>5</td>
<td>Coaching Practice &amp; Skill Development</td>
<td>9</td>
<td>Principles of Sports Coaching</td>
</tr>
<tr>
<td>10</td>
<td>Applied Sports Coaching</td>
<td>10</td>
<td>Unit 10 LO2</td>
</tr>
<tr>
<td>RQF HNC Units</td>
<td>QCF HNC units</td>
<td>Mapping comments</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>RQF unit title</td>
<td>No</td>
<td>QCF unit title</td>
</tr>
<tr>
<td>6</td>
<td>Training, Fitness, Testing</td>
<td>7</td>
<td>Training and Fitness for Sport and Exercise</td>
</tr>
<tr>
<td>7</td>
<td>Training and Fitness for Sport and Exercise</td>
<td>Unit 7 LO3</td>
<td>Unit 6 LO2</td>
</tr>
<tr>
<td>7</td>
<td>Training and Fitness for Sport and Exercise</td>
<td>Unit 7 LO3</td>
<td>Unit 6 LO4</td>
</tr>
<tr>
<td>7</td>
<td>Physical Activity, Lifestyle &amp; Health</td>
<td>21</td>
<td>Physical Activity, Lifestyle and Wellbeing</td>
</tr>
<tr>
<td>21</td>
<td>Physical Activity, Lifestyle and Wellbeing</td>
<td>Unit 21 LO4</td>
<td>Unit 7 LO3</td>
</tr>
<tr>
<td>9</td>
<td>Biomechanics</td>
<td>4</td>
<td>Biomechanics for Sport</td>
</tr>
<tr>
<td>4</td>
<td>Biomechanics for Sport</td>
<td>Unit 4 LO2</td>
<td>Unit 9 LO2</td>
</tr>
<tr>
<td>4</td>
<td>Biomechanics for Sport</td>
<td>Unit 4 LO3</td>
<td>Unit 9 LO3</td>
</tr>
<tr>
<td>4</td>
<td>Biomechanics for Sport</td>
<td>Unit 4 LO4</td>
<td>Unit 9 LO4</td>
</tr>
<tr>
<td>10</td>
<td>Technology in Sport</td>
<td>32</td>
<td>Technology in Sport and Exercise</td>
</tr>
<tr>
<td>11</td>
<td>Injury Prevention</td>
<td>26</td>
<td>Injury Prevention and Treatment in Sport and Exercise</td>
</tr>
<tr>
<td>13</td>
<td>Sports Massage</td>
<td>30</td>
<td>Sport and Exercise Massage</td>
</tr>
<tr>
<td>30</td>
<td>Sport and Exercise Massage</td>
<td>Unit 30 LO3</td>
<td>Unit 13 LO4</td>
</tr>
</tbody>
</table>