



Higher National Unit specification

General information

Unit title: Sports Therapy: Exercise Principles and Testing

Unit code: H4Y4 34

Superclass: PJ

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Version: 03

Unit purpose

The Unit is intended to introduce the key underpinning knowledge of Components of Fitness, Principles of Fitness Training, and Fitness Testing relevant to practitioners of Soft Tissue/Sports therapy. It does not cover the skills of exercise programming, but after successful completion learners should have developed a basic understanding of the key elements underpinning programming. The Unit will help the learner utilise their knowledge of fitness testing and training principles when carrying out assessments with clients who have suffered sports or activity related injury. Knowledge of the rationale used by coaches or fitness professionals in the prescription of programmes or training sessions will allow learners to approach professional functions competently and confidently.

Outcomes

On successful completion of the Unit the learner will be able to:

- 1 Describe the components of Health Related Physical Fitness (HRPF), and the components of Skill Related Fitness.
- 2 Describe the Principles of Training which underpin exercise prescription.
- 3 Describe and perform fitness tests to assess Physical Fitness, and evaluate the health status of a client.

Credit points and level

1 Higher National Unit credit at SCQF level 7: (8 SCQF credit points at SCQF level 7)

Higher National Unit specification: General information (cont)

Recommended entry to the Unit

This Unit has been designed as a mandatory Unit in the Group Award HNC/HND Soft Tissue/Sports Therapy. It is anticipated that learners will therefore have studied related material either at this or lower SCQF levels prior to undertaking this Unit. Ultimately, access is at the discretion of the delivering centre.

Core Skills

There is no automatic certification of Core Skills or Core Skill components in this Unit.

Context for delivery

If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

The Assessment Support Pack (ASP) for this Unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (<http://www.sqa.org.uk/sqa/46233.2769.html>).

Equality and inclusion

This Unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

Higher National Unit specification: Statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Learners should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the components of Health Related Physical Fitness (HRPF), and the components of Skill Related Fitness.

Knowledge and/or Skills

- ◆ Components of Health related fitness
- ◆ Components of Skill Related Fitness

Outcome 2

Describe the Principles of Training which underpin exercise prescription.

Knowledge and/or Skills

- ◆ FITT (Frequency, intensity, time, type) principles
- ◆ Progression
- ◆ Overload
- ◆ Specificity
- ◆ Reversibility

Outcome 3

Describe and perform fitness tests to assess Physical Fitness and evaluate the health status of a client.

Knowledge and/or Skills

- ◆ Static health related tests for: resting heart rate, height, weight, body mass index (BMI), blood pressure, waist measurement, body composition, lung function
- ◆ Dynamic tests for components of Fitness: cardio-vascular endurance, strength, flexibility, local muscular endurance, agility, power, speed
- ◆ Testing procedures and protocols
- ◆ Interpretation of results and post-test feedback

Higher National Unit specification: Statement of standards (cont)

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Evidence Requirements for this Unit

Outcome 1

- ◆ identify and define the components of health related fitness (Cardiovascular endurance, Strength, Local Muscular Endurance, Flexibility)
- ◆ identify and define selected skill related components of fitness (Agility, Power, Speed)
- ◆ identify and define the role and importance of body composition

Outcome 2

- ◆ Describe selected training principles:
 - FITT (Frequency, intensity, time, type) principles
 - Progressive overload
 - Specificity
 - Reversibility

Outcome 3

- ◆ identify appropriate static and dynamic tests for the assessment of physical fitness
- ◆ ensure all relevant pre-test considerations are discussed with the client
- ◆ carry out appropriate static health related tests from: pre exercise heart rate, height, weight, body mass index (BMI), blood pressure, waist measurement, body composition, lung function
- ◆ carry out a dynamic test for each components of Fitness: cardio-vascular endurance, strength, flexibility, local muscular endurance, and one from agility, power, speed
- ◆ adhere to recognised protocols for the selected tests
- ◆ record client details and test results in an appropriate format
- ◆ analyse test results against accepted and referenced norms, and provide accurate feedback regarding their implications



Higher National Unit Support Notes

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Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

Outcome 1

- ◆ Components of health related physical fitness to include Strength, Cardio-vascular endurance, flexibility, local muscular endurance
- ◆ Components of skill related physical fitness to include agility, power, speed)
- ◆ Knowledge of the role and importance of body composition in Sport and Fitness

Outcome 2

- ◆ FITT (Frequency, intensity, time, type) principles
- ◆ General principles of training: specificity, progressive overload, reversibility

Outcome 3

All dynamic and static tests should be recorded in a log book

- ◆ It is important that the learner has an understanding of physical fitness and how it may be measured. Key components are defined in the Evidence Requirements section.
- ◆ The testing process should be considered in the context of use in a sports/physical activity environment. While learners will not be expected to write performance based programmes, they may be required to produce rehabilitation plans and/or have an input into the exercise regime of specific clients. Learners should be able to adequately prepare and inform clients about the process, giving cognisance to screening and informed consent.
- ◆ Static tests should include resting heart rate, height, weight, body mass index (BMI), blood pressure, waist measurement, lung function and body composition measures.
- ◆ Cardio-vascular tests may include; Step tests; Walking tests; Multi stage tests; Cooper 12 minute run, a strand test (Not an exhaustive list).
- ◆ Body Composition tests may include; Skinfold measurement; Bio electrical impedance.
- ◆ Strength tests; Grip strength; 1 RM.
- ◆ Local muscular endurance tests may include; Press up tests; Abdominal curl tests.
- ◆ Flexibility tests; Low back flexibility (Sit and reach); assessment of normal range of motion for ankle, shoulder and trunk (goniometry).
- ◆ Agility Tests: Illinois agility run, t-test, zig-zag test.
- ◆ Power tests may include: vertical jump. Broad jump, Wingate test.

- ◆ Speed tests may include: sprints tests, other sport/activity specific tests.

Higher National Unit Support Notes (cont)

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- ◆ Learners should be able to analyse and interpret test results, draw meaningful conclusions, and give feedback to clients based on results.
- ◆ It is stressed that production of client results and guidance should mirror the expectations of a professional environment. While not all tests will be performed by all learners, it is recommended that a broad spectrum of commonly used tests is covered in order to maximise learner skill set. This will also be important if undertaking the second year Unit *Plan, Teach, and Evaluate a Rehabilitation Programme*.

Guidance on approaches to delivery of this Unit

The Unit will be delivered as one of a number of core Units that will fully prepare the learner for work as a Soft Tissue/Sports Practitioner.

The Unit is divided into three Outcomes with various forms of evidence gathering. Restricted response papers and a fitness testing results portfolio, together with direct observation of the learner with evidence recorded by an assessor checklist should all be adopted.

Guidance on approaches to assessment of this Unit

Evidence can be generated using different types of assessment. There may be other methods that would be more suitable to learners.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

Outcomes 1 and 2

Evidence for these Outcomes will be generated from restricted response questioning regarding selected components of fitness and their significance to physical activity.

Outcome 3

Learners will carry out static and dynamic fitness tests to establish baseline fitness parameters. Testing will be observed against designated test protocols which must be adhered to. Once tested the results should be analysed against available norms and appropriate client feedback offered. Results should be recorded in a portfolio.

The practical elements of the class will be directly observed by assessors who will record organisational and planning tasks, communication, feedback and motivation, demonstration of competence and technical skills, and general appropriateness of the session. Feedback will then be offered to the learner.

Higher National Unit Support Notes (cont)

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Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at www.sqa.org.uk/e-assessment.

Opportunities for developing Core and other essential skills

The Unit is intended to encompass underpinning knowledge required by a Soft tissue/sports Therapist in understanding the nature of activities undertaken by their clients. The functions of the Soft Tissue/Sports Therapy Practitioner may include the assessment of a client's current fitness status, and the prescription on an intervention/rehabilitation strategy.

Delivery of the Unit will also help learners to develop reflective skills enabling them to review and evaluate their own performance.

All elements of the Core Skill of *Problem Solving*, that is, Planning and Organising, Critical Thinking, and Reviewing and Evaluating, could be developed and enhanced in the Unit as learners plan and undertake the complex practical tasks required to appropriately prepare clients for testing sessions. Analysing, identifying, and feeding back the implications, for clients will further involve a high level of critical thinking. Adopting effective strategies which reflect and apply current theory will be an integral aspect.

There are many opportunities to enhance skills in managing co-operative working with others in programmes. Elements of negotiation are intrinsic to the process of fitness testing, and all stages of planning and delivering sessions. A significant level of verbal and non-verbal communication skills will be developed in order to present complex information sensitively and in a style and format most conducive to learning. Learners should be aware of how to

- ◆ collate, organise and structure information effectively
- ◆ emphasise and signpost key points
- ◆ use effective verbal non-verbal communication techniques
- ◆ assure compliance and safety

History of changes to Unit

Version	Description of change	Date
03	Clarification of methods of Assessment	31/08/18
02	Clarification of Knowledge and skills for outcomes	29/08/16

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General information for learners

Unit title: Sports Therapy: Exercise Principles and Testing

This section will help you decide whether this is the Unit for you by explaining what the Unit is about, what you should know or be able to do before you start, what you will need to do during the Unit and opportunities for further learning and employment.

The Unit is intended to introduce the key underpinning knowledge of Components of Fitness, Principles of Fitness Training, and Fitness Testing relevant to practitioners of Soft Tissue/Sports Therapy. It does not cover the skills of exercise programming, but after successful completion you should have developed a basic understanding of the key elements underpinning programming. The Unit will help you utilise your knowledge of fitness testing and training principles when carrying out consultations with clients who have suffered sports or activity related injury. Knowledge of the rationale used by coaches or fitness professionals in the prescription of programmes or training sessions will allow you to approach professional functions competently and confidently.

The Unit is divided into three Outcomes with various forms of evidence gathering: these include restricted response papers and a fitness testing results portfolio, and direct observation by staff.

Outcomes 1 and 2

Evidence for these Outcomes will be generated from restricted response questioning regarding components of fitness and their significance to you as a soft tissue/sports therapist.

Outcome 3

Static fitness tests with designated test protocols should be carried out to establish baseline health parameters, results should be analysed against norms, and appropriate client feedback offered. You will be required to administer a battery of tests designed to assess selected fitness components. You will have to explain the purpose of the tests, and your administration and delivery of them will be assessed. Results will be recorded in a client results portfolio and you will need to interpret and feedback the results.

The practical elements of the class will be directly observed by your assessor, who will record organisational and planning tasks, competence and technical skills, communication, feedback, and the general conduct of the session.