



Higher National Unit specification

General information

Unit title: Applied Exercise Prescription for Special Population Groups

Unit code: H4T5 35

Superclass: MA

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Unit purpose

This Unit aims to provide learners with the Knowledge and Understanding of exercise limitations, benefits and prescription for special population groups. The learner should be able to utilise a range of motivational and communication methods to lead an effective client specific exercise session, prescribe suitable physical activity programmes and suggest progression routes for special population groups.

Outcomes

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

- 1 Research and report on specific implications of exercise for a range of special population groups.
- 2 Plan and prescribe effective exercise sessions for specific special population groups.
- 3 Deliver the planned sessions to specific special population groups.
- 4 Evaluate the exercise sessions and prescribe suitable progression routes.

Credit points and level

2 Higher National Unit credits at SCQF level 8: (16 SCQF credit points at SCQF level 8)

Recommended entry to the Unit

Whilst entry is at the discretion of the centre, learners should possess good written and oral communication skills. Other knowledge skills or experience relevant to the Unit would also be beneficial, for example *Health Screening* and *Exercise Principles and Programming*.

Higher National Unit specification: General information (cont)

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Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes for this Unit specification.

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

Research and report on specific implications of exercise for a range of special population groups.

Knowledge and/or Skills

- ◆ Utilisation of a range of data sources
- ◆ Imposed limitations for client groups
- ◆ Benefits of exercise for client groups
- ◆ Adaptations required of skills and facilities for client groups

Outcome 2

Plan and prescribe effective exercise sessions for specific special population groups.

Knowledge and/or Skills

- ◆ Collection, collation and analysis of client information
- ◆ Principles of training (Frequency, Intensity, Time, Type)
- ◆ Current accepted exercise prescription guidelines
- ◆ Exercise prescription
- ◆ Adaptations
- ◆ Session planning
- ◆ Justification of motivation techniques and leadership styles

Higher National Unit specification: Statement of standards (cont)

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Outcome 3

Deliver the planned sessions to specific special population groups.

Knowledge and/or Skills

- ◆ Leadership styles
- ◆ Motivational tools
- ◆ Health and safety requirements
- ◆ Application of exercise prescription
- ◆ Session content
- ◆ Application of warm up and cool down
- ◆ Effective communication skills
- ◆ Effective delivery for selected special population group

Outcome 4

Evaluate the exercise sessions and prescribe suitable progression routes.

Knowledge and/or Skills

- ◆ Observation skills
- ◆ Self-awareness analysis skills
- ◆ Reporting skills
- ◆ Progression routes

Evidence Requirements for this Unit

It is strongly recommended that Assessments 1 and 2 are assessed together as a single assignment, and Outcomes 3 and 4 should form one holistic assessment for this Unit in the form of a portfolio.

Learners will need to provide evidence to demonstrate their Knowledge and/or Skills across all Outcomes by showing that they can:

Outcome 1 Research, evaluate and report on specific implications of exercise for a range of special population groups.

- ◆ Client groups should be chosen from: children, post natal, older adult, disabled, rehabilitation patient or sports person(s). Two client groups should be selected.
- ◆ Research, evaluate and report on the implications of exercise for the two selected special population groups. This should cover current research and thinking which underpins guidance and delivery of exercise programming for the selected groups.
- ◆ Research should be clearly referenced and cover a minimum of three issues for exercise limitations; three for exercise benefits; and three for adaptations required of skills and facilities for the client group.

Higher National Unit specification: Statement of standards (cont)

Unit title: Applied Exercise Prescription for Special Population Groups

Assignment: Outcome 1 should form the knowledge base for which the content of the session plans should be written (Outcome 2) and then practically applied (Outcomes 3 and 4). This Outcome may be assessed either as a written assignment, or as an oral presentation, in which case a combination of audio-visual materials/tools must be used to demonstrate knowledge of the subject area.

Outcome 2 Plan and prescribe effective exercise sessions for specific special population groups.

- ◆ Use information on clients' fitness capabilities to prepare a series of session plans (minimum of 12 progressive session plans for each of the two selected special population groups).
- ◆ Adhere to current health and safety guidelines/legislation.
- ◆ Utilise current exercise guidelines for relevant components of fitness.
- ◆ Utilise principles of training.
- ◆ Suggest and provide a rationale for adaptations to exercises.
- ◆ Suggest timings of session components.
- ◆ Plan equipment and facility use.
- ◆ Suggest and justify motivational tools and communication styles appropriate to the special population group.

Assignment: Outcome 2 — Learners must prepare and present a series of session plans (minimum of 12) for an exercise session which lasts for a time appropriate to the specific special population group, taking into consideration exercise limitations and health and safety issues. This Outcome should directly reflect information gathered in Outcome 1. This Outcome should form the knowledge base from which the session plans are practically applied (Outcome 3) and evaluated (Outcome 4).

Outcome 3 Deliver the planned sessions to the specific special population groups.

- ◆ Instruct and evaluate the twelve planned exercise session for the special population groups.
- ◆ Demonstrate suitable motivational tools and communication techniques to selected population groups.
- ◆ Session length will be determined by the limitations of the specific special population groups.

Practical Assessment: Outcome 3 — The assessment will be for a suitable time length for the selected special population group. This Outcome will utilise the information gathered in Outcome 1 and be based on the session plans (Outcome 2).

Higher National Unit specification: Statement of standards (cont)

Unit title: Applied Exercise Prescription for Special Population Groups

Outcome 4 Evaluate the exercise sessions and prescribe suitable progression routes.

Learners should provide an analysis of client responses/performance, and evaluate the effectiveness of:

- ◆ the session in fulfilling stated aims and objectives
- ◆ health and safety arrangements
- ◆ motivational and communication skills used
- ◆ their own instructional performance and ability to progress the session effectively

Appropriate client and exercise progression from the session should be identified and justified.

Assignment: Outcome 4 — After the observed session, the learner should complete the evaluation checklist. Assessor input should also be noted, with a short discussion on the session if necessary. Evaluation can be in oral form and recorded during the session.



Higher National Unit Support Notes

Unit title: Applied Exercise Prescription for Special Population Groups

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 80 hours.

Guidance on the content and context for this Unit

This Unit should emphasise both the importance of theoretical knowledge and sound practical skills in relation to exercise prescription for special population groups. Ideally the learner will work through the Unit, applying the principles and knowledge gained to produce a portfolio of information specific to their special population client/group.

Outcome 1 Research and report on specific implications of exercise for a range of special population groups.

Special population groups: children, post natal, older adult, disabled, rehabilitation patient and sports person(s).

For all groups, information should be gathered on:

- ◆ Specific limitations, special needs.
- ◆ Physical/physiological/psychological/other potential benefits of exercise.
- ◆ Adaptations required of skills and facilities.

All clients should be screened to ensure safe exercise participation and referred to a doctor for consent if necessary.

Outcome 2 Plan and prescribe effective exercise sessions for specific special population groups.

- ◆ Suitable session content for selected special population group.
- ◆ Length of session will be determined by the limitations of the selected special population group.

Outcome 3 Deliver the planned sessions to the specific special population groups.

Prior to the session: Personal/equipment/facility prepared and health and safety checked.

During the session: Meet and greet clients, deliver safe and effective exercise session appropriate to specific special population group. Evaluate each session.

After session: Equipment/facility tidy. Relate evaluation to progression for following sessions.

Higher National Unit Support Notes (cont)

Unit title: Applied Exercise Prescription for Special Population Groups

It is recommended that the twelve sessions are delivered as part of a placement.

Outcome 4 Evaluate the exercise sessions and prescribe suitable progression routes.

Evaluation areas: Health and safety, client responses/performance, aims and objectives of the session, motivational and communication skills used, own instructional performance, pace, progress and success of the session.

Guidance on approaches to delivery of this Unit

The Unit will be delivered as one of a number of Units that will fully prepare the learner for work as a Fitness, Health and Exercise Professional. It will specifically prepare learners to work with special population groups.

This Unit is delivered as a year two mandatory Unit in HND *Fitness, Health and Exercise*. Knowledge and expertise gained in *Exercise Principles and Programming, Anatomy and Exercise Physiology* and practical Units will provide a basis for this Unit, although it may also be free-standing. There are opportunities to link this Unit with *Applied Nutrition Assessment and Prescription* and *Applied Fitness Assessment for Special Population Groups*. The content of these Units directly feed into the Graded Unit for year 2 of HND *Fitness, Health and Exercise* programme.

The knowledge and expertise gained from this Unit may underpin other specialist options, eg *Physical Activity for Children, Exercise for Pre and Post Natal Clients, Plan, Deliver and Evaluate an Exercise Session for Older Adults, Assisting Sports for Disability*.

Assessment for this Unit is in the form of practical exercise backed up with a portfolio containing underpinning knowledge. Oral presentations may be allowed for written assignments. Practical assessments may be recorded for verification purposes.

It is strongly recommended that learners work with live clients from special population groups to research, plan, deliver and evaluate exercise programmes. This will enhance their learning experience and contribute to their employability. Where this is not possible learners will choose a special population group to base their portfolio on and will carry out the practical assessments in simulated conditions.

Guidance on approaches to assessment of this Unit

Evidence can be generated using different types of assessment. The following are suggestions only. 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.

Higher National Unit Support Notes (cont)

Unit title: Applied Exercise Prescription for Special Population Groups

It is strongly recommended that assessments 1 and 2 are assessed together as a single assignment, and Outcomes 3 and 4 should form one holistic assessment for this Unit in the form of a portfolio.

Outcome 1 should form the knowledge base for which the content of the session plans should be written (Outcome 2) and then practically applied (Outcomes 3 and 4). This Outcome may be assessed either as a written assignment, or as an oral presentation, in which case a combination of audio-visual materials/tools must be used to demonstrate knowledge of the subject area.

Outcome 2 — learners must prepare and present a series of session plans (minimum of 12) for an exercise session which lasts for a time appropriate to the specific special population group, taking into consideration exercise limitations and health and safety issues. This Outcome should directly reflect information gathered in Outcome 1. This Outcome should form the knowledge base from which the session plans are practically applied (Outcome 3) and evaluated (Outcome 4).

Outcome 3 — the assessment will be for a suitable time length for the selected special population group. This Outcome will utilise the information gathered in Outcome 1 and be based on the session plans (Outcome 2).

Outcome 4 — after the observed session, the learner should complete the evaluation checklist. Assessor input should also be noted, with a short discussion on the session if necessary. Evaluation can be in oral form and recorded during the session.

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.

Higher National Unit Support Notes (cont)

Unit title: Applied Exercise Prescription for Special Population Groups

Opportunities for developing Core and other essential skills

Throughout the Unit, learners are required to research and analyse material. There are opportunities to use the internet and other information sources, leading to skill development in *Information and Communication Technology (ICT)* and *Communication*.

All elements of *Problem Solving* could be developed and enhanced as learners plan, analyse and evaluate the complex tasks involved.

Therefore there are opportunities to develop the Core Skill of *Information and Communication Technology, Problem Solving, Communication* and *Working with Others* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Outcomes 2 and 3 may require numeracy skills to plan and deliver an exercise session.

History of changes to Unit

Version	Description of change	Date

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General information for learners

Unit title: Applied Exercise Prescription for Special Population Groups

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 provide you with the knowledge and skills required to plan and prescribe effective exercise sessions for specific special population groups. The Unit will help you research, plan, deliver and evaluate exercise sessions for special population clients. On completion of the Unit you will have gained the knowledge and skills to lead effective client specific exercise sessions and prescribe suitable physical activity programmes for clients from special population groups.

It is strongly recommended that Assessments 1 and 2 are assessed together as a single assignment, and Outcomes 3 and 4 should form one holistic assessment for this Unit in the form of a portfolio.

Outcome 1

Assignment — This Outcome will require you to research the specific implications of exercise for a range of special population groups. This will provide you with the underpinning knowledge for planning a series of exercise sessions for the special population group (Outcome 2) and then practically applied (Outcomes 3 and 4). This Outcome may be assessed either as a written assignment, or as an oral presentation, in which case a combination of audio-visual materials/tools must be used to demonstrate knowledge of the subject area.

Outcome 2

Assignment — You will be required to prepare and present a progressive series of exercise sessions for your special population group (minimum of 12) taking into consideration the information gathered in Outcome 1. Each exercise session should last for a time appropriate to the specific special population group, taking into consideration exercise limitations and health and safety issues. This Outcome should directly reflect information gathered in Outcome 1. This Outcome should form the knowledge base from which the session plans are practically applied (Outcome 3) and evaluated (Outcome 4).

Outcome 3

Practical Assessment — The programme of exercises you planned in Outcome 2 will now be delivered. The assessment will be for a suitable time length for the selected special population group. It is strongly recommended that these are delivered with live client groups.

Outcome 4

After the delivered and observed session, you should complete an evaluation checklist. An evaluation of each session will be carried out. You will be directly observed, at least once, by an assessor and feedback will be offered. Evaluation can be in oral form and recorded during the session.

General information for learners (cont)

Unit title: Applied Exercise Prescription for Special Population Groups

The practical elements of the Unit should be delivered to live clients in their own environment.

This Unit can be extremely rewarding if delivered with live client groups. A portfolio can be produced for learner assessment purposes, but also for client interest.

Throughout the Unit, you will be required to research and analyse material. There are opportunities to use the internet and other information sources, leading to skill development in *Information and Communication Technology (ICT)* and *Communication*.

All elements of *Problem Solving* could be developed and enhanced as you plan, analyse and evaluate the complex tasks involved.

Therefore there are opportunities to develop the Core Skill of *Information and Communication Technology, Problem Solving, Communication* and *Working with Others* at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Outcomes 2 and 3 may require numeracy skills to plan and deliver an exercise session.