



National Unit Specification: general information

UNIT Exercise and Fitness: Circuit Training (SCQF level 6)

CODE F7JE 12

SUMMARY

This Unit is an optional Unit of the National Progression Award in Exercise and Fitness Leadership, but can also be taken as a free-standing Unit. The Unit is suitable for candidates with some previous experience in exercise and fitness training who wish to undertake regular exercise and fitness training or who wish to pursue a career in the fitness industry.

In this Unit candidates will gain underpinning knowledge of, and develop safe and effective practical skills in circuit training.

On successful completion of this Unit candidates will be able to identify and demonstrate safe and effective circuit exercises. Candidates will be able to demonstrate and evaluate both the exercises and their own technical abilities, personal and facility equipment relating to the selected activities.

This Unit is designed for candidates with some previous experience of exercise and fitness who wish to pursue a career in the fitness industry.

OUTCOMES

- 1 Describe circuit training exercises relating to major muscles and muscle groups.
- 2 Describe basic physiological effects of circuit training on the body.
- 3 Plan and prepare a circuit demonstration for a group of clients ensuring each exercise is adapted for the client group .
- 4 Demonstrate a circuit for a group of clients and evaluate personal performance.

Administrative Information

Superclass: MD

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National Unit Specification: general information (cont)

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RECOMMENDED ENTRY

While entry is at the discretion of the centre, candidates would normally be expected to have attained one of the following, or equivalent:

D677 11 *Exercise and Fitness — Circuits*
F40B 11 *Contemporary Exercise and Fitness Training Methods: An Introduction*
F40E 11 *Human Anatomy, Physiology, and Physical Activity*
D681 12 *Human Physiology in the Development of Performance*

CREDIT VALUE

1 credit at SCQF level 6 (6 SCQF credit points at SCQF level 6*).

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

CORE SKILLS

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

Opportunities for developing aspects of Core Skills are highlighted in Learning and Teaching Approaches for this Unit.

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.

OUTCOME 1

Describe circuit training exercises relating to major muscles and muscle groups.

Performance Criteria

- (a) Identify major muscles and muscle groups of the body.
- (b) Outline a range of circuit training exercises relating to major muscles.

OUTCOME 2

Describe basic physiological effects of circuit training on the body.

Performance Criteria

- (a) Describe basic physiological effects of circuit training on the skeletal system.
- (b) Describe basic physiological effects of circuit training on the muscular system.
- (c) Describe basic physiological effects of circuit training on the cardio-vascular system.
- (d) Describe basic physiological effects of circuit training on the respiratory system.
- (e) Describe basic physiological effects of circuit training on the nervous system.

OUTCOME 3

Plan and prepare a circuit for a group of clients ensuring each exercise is adapted for the client group.

Performance Criteria

- (a) Plan the circuit with a minimum of eight stations.
- (b) Select exercises to ensure a balanced programme.
- (c) Identify correct key points for each exercise.
- (d) Adaptations for each exercise are selected.
- (e) Explain one progression for each exercise.
- (f) Select appropriate equipment for the session.

OUTCOME 4

Demonstrate a circuit for a group of clients and evaluate personal performance.

Performance Criteria

- (a) Demonstrate a circuit with a minimum of eight stations.
- (b) Evaluate the demonstrated circuit accurately.

National Unit Specification: statement of standards (cont)

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EVIDENCE REQUIREMENTS FOR THIS UNIT

Outcome 1: Written and/or oral recorded evidence obtained under controlled, supervised conditions. The assessment should be closed-book, restricted response. This should last no longer than one hour. The candidate should identify major muscle groups of the body and a minimum of two circuit training exercises for each muscle group stated.

Major muscles/muscle groups including: Abdominals, Obliques (Internal and External), Deltoids; Trapezius; Latissimus Dorsi; Erector Spinae, Biceps; Triceps; Pectorals; Gluteals; Hamstrings; Quadriceps; Gastrocnemius, Soleus.

For the purposes of this Unit the following minimum evidence and definitions should be considered:

Major muscles and muscle groups identified for this Outcome must include all of the above. Exercises must be outlined for each of the above.

Outcome 2: Written and/or oral recorded evidence obtained under controlled, supervised conditions. The assessment should be closed-book, restricted response. This should last no longer than one hour. The candidate should identify a minimum of three physiological adaptations occurring in each of the following systems: Skeletal; Muscular; Cardiovascular; Respiratory; and Nervous.

Outcome 3: Written and/or oral recorded evidence in the form of a session plan and circuit cards for an eight station circuit must be prepared. This should include the exercises selected; and for each exercise: the major muscles and muscle groups used; a minimum of two key points, a minimum of one adaptation and minimum of one progression.

Outcome 4: Performance evidence of the circuit planned in Outcome 3 supported by an observation checklist. Evidence may be supplemented by video recordings. The candidate should demonstrate their circuit. Candidates will be assessed on delivery and technical skills, and should have a minimum of eight stations to demonstrate. The candidates are only required to deliver the exercise demonstrations carried out at the beginning of a class.

Following the session the candidate should evaluate their own performance and make recommendations for future improvement. This should be done during a professional discussion with the assessor and the Outcome/s recorded as evidence.

The assessor must record the discussion. The assessor is responsible for ensuring that the points that need to be covered are brought into the discussion by the candidate.

National Unit Specification: support notes

UNIT Exercise and Fitness: Circuit Training (SCQF level 6)

This part of the Unit Specification is offered as guidance. The support notes 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

This is essentially a practical Unit and should be taught in a practical setting with ongoing tutorial support however the Unit also requires underpinning theoretical knowledge of human physiology and the development of safe and effective circuit training classes.

For the practical elements of the Unit an appropriate environment and sound equipment is required. It should be emphasised that this Unit is designed to introduce candidates to the concept of demonstrating circuit training exercises; it is *not* designed to allow candidates to teach/instruct others.

Outcome 1 major muscles and muscle groups should be identified by the candidate and a minimum of two circuit training exercises selected for each muscle group stated.

Exercises may be chosen from the following: muscular endurance, cardiovascular endurance, body weight, sport specific, mixed, plyometric, isometric and agility.

Outcome 2: The candidate should state the physiological benefits associated with regular circuit training. This should be in relation to the Skeletal; Muscular; Cardiovascular; Respiratory; and Nervous systems. Students should state a minimum of 3 from each. Examples of these are:

Skeletal system:

- Increased bone strength
- Increased strength of connective tissue
- Decreased calcium loss
- Increased range of movement
- Reduced joint problems

Muscular system:

- Increased strength/aerobic capacity in muscle
- Increased physical work capacity
- Improved muscular definition
- Improved posture
- Helps ease back problems

Cardio-Vascular system:

- Reduced risk of heart attack
- Reduced blood pressure
- Improved capacity for sub-maximal exercise
- Changes to blood composition
- Lowered resting heart rate

National Unit Specification: support notes (cont)

UNIT Exercise and Fitness: Circuit Training (SCQF level 6)

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Respiratory System:

- Improved lung function
- Increased resistance to fatigue
- Bigger surface area at alveoli
- Better elasticity in lung tissue
- Higher oxygen saturation in the blood

Nervous System:

- Improved co-ordination
- Improved balance
- Increased agility
- Improved neuromuscular connection speed
- Improved reaction time

Outcome 3: The candidate is required to produce a session plan for a circuit demonstration. This should include the exercises selected in the form of a circuit map; and for each exercise: the major muscle groups used; a minimum of two key points, a minimum of one adaptation and one progression, the correct equipment selected and the production of a circuit card. The session plan should be submitted to the assessor to ensure Health and Safety requirements are met.

Outcome 4: The candidate is required to demonstrate their chosen circuit exercises. This should follow the session plan developed in Outcome 3 and should be demonstrated in accordance with best practice. The candidate should evaluate their own performance and make recommendations for future improvement. The evaluation should consider technical aspects of exercise technique, posture and awareness of their personal limitations. This should be done as soon as possible after the assessment demonstration.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

Candidates should initially be introduced to circuit training in a practical setting. Underpinning knowledge should however be developed by the use of handouts, diagrams and work packs. Most of the Unit should, however, be delivered in a practical situation.

Centres should ensure that theoretical input covers the principles specified in all Outcomes, and that these are continually reinforced during delivery of the practical elements. It is important that candidates are aware of the importance of regular fitness based activity: current ACSM guidelines may be used here.

National Unit Specification: support notes (cont)

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OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

The Unit requires some elements of feedback, review and reflection, there may be opportunities to develop both Oral/Written Communication skills and *Problem Solving*.

The candidate will be required to explain and describe and in so doing will have the opportunity to develop skills in both Oral and Written Communication.

As candidates will be required to reflect on their own performance and that of others in a group, there will be further opportunities to develop skills in *Problem Solving* in addition to some opportunities to develop skills in *Working with Others*.

Throughout the Unit, candidates are required to research and analyse material both individually and in groups. There may be opportunities to use the Internet and other information sources, leading to **skill development in *Information and Communication Technology (ICT)* and *Communication***.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Centres must be satisfied that the evidence submitted is the work of individual candidates.

Outcome 1: Written and/or oral recorded evidence obtained under controlled, supervised conditions. The assessment should be closed-book, restricted response. This should last no longer than one hour.

Outcome 2: Written and/or oral recorded evidence obtained under controlled, supervised conditions. The assessment should be closed-book, restricted response. This should last no longer than one hour.

Outcome 3: Written and/or oral recorded evidence in the form of a session plan and circuit cards for an eight station circuit demonstration. This should include, for each exercise: the major muscles and muscle groups used; teaching points, adaptations and progressions, and equipment required.

Outcome 4: Performance evidence of delivery and technical skills relating to the eight station circuit planned in Outcome 3, supported by an observation checklist. Evidence may be supplemented by video recordings. Note: the candidate is *not* required to teach a full circuit training class, they are only required to deliver the exercise demonstrations normally carried out at the beginning of a class.

Candidate should evaluate their own performance and make recommendations for future improvement. This should be done during a professional discussion with the assessor and the Outcome/s recorded as evidence.

Opportunities for the use of 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 communications technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

National Unit Specification: support notes (cont)

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DISABLED CANDIDATES AND/OR THOSE WITH ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes:

Version	Description of change	Date
02	Outcome 3 (page 1) amended for clarification and to reflect Outcome 3 (page 3) as per the Unit Specification.	29/03/2010