

Unit 14: Exercise and Fitness Instruction

Unit code: J/502/5534

QCF Level 2: BTEC First

Credit value: 10

Guided learning hours: 60

● Aim and purpose

The aim of this unit is to equip learners with the knowledge and skills required to plan an exercise programme and assist in instructing an exercise session.

● Unit introduction

The exercise and fitness industry remains a growth industry and is backed by many government initiatives to improve the health of the nation. Consequently, there is a constant need for qualified fitness instructors to train and educate people.

To succeed in exercise and fitness instruction learners must understand the principles behind exercise programme design and gain the relevant knowledge of and practical skills in exercise and fitness instruction. Exercise and fitness instructors must also have excellent communication skills as these are crucial when dealing with the public in order to help build good relationships.

Any person undertaking this qualification is likely to work in the sport and leisure industry for a period of time, whether it is for work experience, part-time employment or to pursue a long-term career in the industry. This unit prepares learners for dealing with the public by giving them a good grounding in how to assist in instructing exercise and fitness.

This unit covers all the key aspects needed to successfully plan exercise programmes and to competently assist in delivering exercise sessions. As a starting point, the principles behind exercise session design and exercise programming are covered, including the principles of training and health and safety issues. This is followed by planning an exercise session which includes the aims of the session and ways of determining activity selection. Learners will then assist in instructing a variety of exercise sessions. The final part of the unit requires learners to review their exercise sessions in order to determine their personal development needs as an instructor and future client needs.

● Learning outcomes

On completion of this unit a learner should:

- 1 Know the principles of exercise session design and exercise programming
- 2 Be able to plan an exercise programme
- 3 Be able to assist in instructing exercise sessions
- 4 Be able to undertake a review of exercise sessions.

Unit content

1 Know the principles of exercise session design and exercise programming

Principles of fitness training: frequency; intensity; time; type; progression; overload; specificity; reversibility; over-training

Health and safety for clients: exercise and fitness code of ethical practice; informed consent; medical and activity history; induction; importance of technique; stability and alignment of joints; momentum; correct attire eg clothing and footwear

Warm up: functions of the warm up; structure of the warm up (mobility section, pulse raising section, static stretching)

Cool down: functions of the cool down; structure of cool down (pulse lowering section, static stretching, developmental stretching)

2 Be able to plan an exercise programme

Plan: session aims and objectives; frequency; intensity; time; type

Factors to consider: assess levels of activity and lifestyle (appropriate screening); address areas needed to develop fitness and health; aims (specific to client goals)

Clients: eg individuals, groups, people with low fitness levels, people with particular needs, experienced and inexperienced clients

Activity selection: eg activities that can fit easily into client's routine (walking to work), resistance training, cardiovascular training, circuit training, client's enjoyment, client's goals, weather conditions, cost, availability, transport, culture

3 Be able to assist in instructing exercise sessions

Exercise session: induction; resistance training; cardiovascular training; circuit training

Start of the session: eg setting up and checking the equipment, communication and relationship with clients, new clients (identification and screening), advise clients of facility emergency procedures, explanations of planned activities and demonstrations, warm up, monitor clients to ensure exercising safely, methods of motivation (appropriate words of encouragement)

During the session: eg methods of voice projection, monitoring clients, correcting client technique, instructor responses to problems, adapting exercises (different ability levels)

Ending the session: eg cool down appropriate to client fitness levels, opportunity for client to ask questions, feedback to clients on the session, departure of clients, check equipment used and put away

4 Be able to undertake a review of exercise sessions

Review: eg feedback from clients with regard to outcomes and goals, effectiveness of planned activities, management of session (health and safety issues, welfare of clients – ensuring clients drink water during the session), methods of improving session, documentation

Modify: eg future planning to ensure adherence, changing activities to maintain interest and ensure fitness progression

Development needs: personal development; SMART (specific, measurable, achievable, realistic, time-bound) targets; development opportunities eg specific training and courses, observation of experienced instructors; future client needs

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 describe the principles of fitness training	M1 explain the principles of fitness training	D1 relate the principles of fitness training to a range of clients with different needs
P2 describe the health and safety issues an exercise instructor needs to consider for their clients		
P3 produce exercise programmes for three different types of client [CT1, CT3]	M2 produce detailed exercise programmes for three different types of client	D2 produce exercise programmes, justifying the range of activities suggested for three different types of client
P4 assist in instructing induction, resistance training, cardiovascular training and circuit training sessions for selected clients [TW3, TW5]	M3 demonstrate effective communication with selected clients	D3 demonstrate competence in monitoring and adapting exercises to suit different client ability levels.
P5 review three different exercise sessions identifying strengths, areas for improvement and personal development needs. [RL1, RL2, RL3]	M4 justify identified personal development needs.	

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

This unit is practically based. Learners have the opportunity to plan exercise programmes and assist in instructing exercise sessions. The principles of training must be taught and this could be complemented by learners looking at their own or others' training programmes. In terms of the health and safety of clients, learners must understand and be able to implement the Exercise and Fitness Code of Ethical Practice. In a practical session, they may be shown the importance of technique in lifting weights. Stability and the correct alignment of joints can be demonstrated in a range of situations including resistance and circuit training sessions. Learners can then take part in a variety of warm ups and cool downs, which could include exercise to music, resistance training and gym cardiac equipment. However, each warm up and cool down must have the same basic components and learners need to be aware of the functions of each.

Learners need to be made aware of different types of Pre-Activity Readiness Questionnaires (PAR-Q) and how to analyse these questionnaires. They will also need to be taught how to assess the activity levels and lifestyles of individuals and determine which activities would be suitable for them. Learners need to ask personal questions and will need to develop good interpersonal skills. It would be a good idea for learners to canvass family and friends to practise these skills. Skills in planning an exercise programme can be developed effectively through small group case studies.

Implementing an exercise session is practical and, for this, learners need to take part in a range of exercise sessions. They may then lead small sections of an exercise session and be given detailed feedback on their strengths and areas for improvement. Eventually, every learner should have led every part of an exercise session.

Learners need to review exercise sessions. The class could discuss how to review an exercise session. This review is likely to include a discussion with clients to determine the effectiveness of the exercise session. This could be practised in a role-play situation. Learners could devise client feedback questionnaires, with tutor support, in order to ensure all the pertinent issues are addressed. Case studies could also develop learners' skills in reviewing exercise sessions. Learners must be able to assess their own personal development needs. The tutor may help learners with this development plan by giving them a list of, and describing relevant qualifications from which they may determine the most suitable for their needs.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and/assessment
Tutor introduces the unit and outlines the assessment.
Assignment 1: Principles of Training and Health and Safety (P1, P2, M1, D1). Tutor introduces the assignment brief
Principles of training – tutor introduces the topic. Individual activity matching the principles of training to given examples
Health and safety considerations – tutor facilitates a class discussion on health and safety considerations. Practical activities for learners looking at correct technique, stability and alignment of joints
Warm-up and cool down – tutor explains components of a warm up and cool down. Practical activities and opportunities for learners to lead parts of a warm up and cool down
Factors to consider when planning an exercise session – tutor facilitates a class discussion. Individual learner activity to collect relevant information from family or friends
Activity selection – tutor introduces topic. Paired activity involving identifying suitable activities for case studies. Feedback to class
Planning an exercise programme – case studies. Tutor explains principles of exercise programme design. Learners work in small groups to plan exercise programmes for the client case studies provided. Feedback to class
Assignment 2: Planning Exercise Programmes (P3, M2, D2). Tutor introduces the assignment brief. Includes time for learner individual study completed in own time
Instructing an exercise session – practical activities covering induction, resistance training, cardiovascular training and circuit training. Initially tutor-led with opportunities for learners to lead parts of the session and get verbal feedback. Learners to practise in own time
Reviewing an exercise session activity – tutor facilitates class discussion on how to review an exercise session. In small groups, learners identify instructor development needs and future client needs from given scenarios
Assignment 3: Assist in Instructing and Review Exercise Sessions (P4, P5, M3, M4, D3). Tutor introduces the assignment brief. Includes learner individual work completed in own time
Evaluation of the unit and assessment activities

Assessment

For criteria P1 and P2, learners must describe the principles of fitness training (P1) and the health and safety issues an exercise instructor needs to consider for their clients (P2). These criteria can be assessed through a written assignment, for example an induction booklet for fitness instructors describing the principles of training and health and safety issues. Learners need to produce exercise programmes for three different types of client (P3). Exercise programmes can be produced in a variety of formats, but it would be useful if learners select a format that is used in industry. The exercise programmes must be suitable for the clients. For P4, learners need to assist in instructing induction, resistance training, cardiovascular training and circuit training sessions for selected clients. P4 needs to be assessed practically and an observation checklist could be used by the tutor/ assessor to confirm achievement. Learners do not need to instruct the whole session. However, they must lead part of the session and be present to assist with the rest of the session. Finally, learners need to review three different exercise sessions identifying strengths, areas for improvement and personal development needs (P5). This can be evidenced in written format or through a professional discussion with their tutor.

For M1, learners must explain the principles of training. This could be evidenced in the induction booklet if this form of assessment were chosen. Learners should provide examples to illustrate their points. They need to produce detailed exercise programmes for three different types of client (M2). The warm up and cool down should be planned in detail and timings for the main component included. As well as formal exercise, everyday activities should be included where appropriate. When assisting in instructing the induction, resistance training, cardiovascular training and circuit training sessions for selected clients, learners need to demonstrate effective communication (M3). Tutors can assess this using an observation checklist. In reviewing three different exercise sessions learners need to justify their personal development needs (M4). In doing this they need to give reasons why they have identified these development needs.

For D1, learners need to relate the principles of training to a range of clients with different needs. Again, this could be included in an induction booklet. Added detail in the form of a range of examples would enhance the booklet. Learners need to justify the range of activities suggested for three different types of client (D2). Reasons could include fitting easily into the client's routine, no cost, available close to home, no need for transport, an activity the client enjoys, will help achieve goals. Learners need to demonstrate competence in monitoring and adapting exercises to suit different client ability levels (D3). This may include monitoring levels of exertion and reducing intensity depending on the activity. Adapting exercises may also involve selecting a different exercise, for example a resistance machine rather than free weight exercises. Tutors should complete an observation record to confirm the criteria met/not met.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, M1, D1	Principles of Training and Health and Safety	You are working as a health fitness instructor in a fitness centre and gym. Your job responsibilities include planning exercise programmes for clients and helping to instruct exercise sessions. Describe the principles of fitness training and health and safety issues.	Induction booklet for fitness instructors
P3, M2, D2	Planning Exercise Programmes	Produce exercise programmes for three different types of client.	Written exercise programmes
P4, P5, M3, M4, D3	Assist in Instructing and Review Exercise Sessions	Assist in instructing exercise sessions and then review the exercise sessions.	Practical observations and assessment Professional discussion with tutor

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Sport sector suite. This unit has particular links with the following unit titles in the BTEC Sport suite and the BTEC Sport and Exercise Sciences suite:

Level 2 Sport	Level 3 Sport	Level 3 Sport and Exercise Sciences
Fitness Testing and Training	Principles of Anatomy and Physiology in Sport	Anatomy for Sport and Exercise
Anatomy and Physiology for Sport	Fitness Training and Programming	Sport and Exercise Physiology
Injury in Sport	Sports Coaching	Exercise, Health and Lifestyle
Development of Personal Fitness	Exercise, Health and Lifestyle	Fitness Training and Programming
Planning and Leading Sports Activities	Instructing Physical Activity and Exercise	Instructing Physical Activity and Exercise
Effects of Exercise on the Body Systems	The Physiology of Fitness	Sports Coaching
	Exercise for Specific Groups	Exercise for Specific Groups

This unit links with the National Occupational Standards (NOS) for:

- Sport, Recreation and Allied Occupations at Level 1
- Instructing Exercise and Fitness at Level 2
- Operational Services at Level 2.

Essential resources

Learners must have access to resistance training equipment, cardiovascular training machines and sufficient space for circuit training, such as access to a sports hall.

Employer engagement and vocational contexts

This unit will give learners the background knowledge and skills needed to work in the exercise and fitness industry. Centres are encouraged to develop links with local leisure clubs and gyms. This could be via talks, demonstrations, workshops or visits.

Indicative reading for learners

Textbooks

Adams M, Beashel P, Hancock J, Harris B, Phillippo P, Sergison A and Taylor I – *BTEC Level 2 First Sport Student Book* (Pearson, January 2010) ISBN 9781846906220

Adams M, Beashel P, Harris B, Johnson S, Phillippo P and Sergison A – *BTEC Level 2 First Sport Teaching Resource Pack* (Pearson, April 2010) ISBN 9781846907173

Coulson M – *The Fitness Instructor's Handbook: A Complete Guide to Health and Fitness – Fitness Professionals* (A&C Black, 2007) ISBN 9780713682250

Franks B D and Howley E T – *Fitness Leader's Handbook* (Human Kinetics Europe, 1998)
ISBN 9780880116541

Howley E T and Franks B D – *Health Fitness Instructor's Handbook* (Human Kinetics Europe, 2003)
ISBN 9780736042109

Journals

American College of Sport Medicine's Health and Fitness Journal

Healthex Specialist

Journal of Physical Activity and Health

Peak Performance

Websites

American College of Sports Medicine	www.acsm.org
British Association of Sport and Exercise Sciences	www.bases.org.uk
Coachwise	www.1st4sport.com
Human Kinetics	www.humankinetics.com
Top End Sports	www.topendsports.com

Delivery of personal, learning and thinking skills (PLTS)

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Creative thinkers	producing exercise programmes for three different types of client
Reflective learners	reviewing three different exercise sessions identifying strengths, areas for improvement and personal development needs
Team workers	assisting in instructing induction, resistance training, cardiovascular training and circuit training sessions for selected clients

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	researching the principles of fitness training and health and safety issues
Creative thinkers	practising producing exercise programmes
Reflective learners	practising reviewing exercise sessions
Team workers	instructing exercise sessions for peers

● Functional Skills – Level 2

Skill	When learners are ...
ICT – Use ICT systems	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	researching the principles of fitness training researching health and safety issues producing fitness training programmes
ICT – Find and select information	
Select and use a variety of sources of information independently for a complex task	researching the principles of fitness training researching health and safety issues
Access, search for, select and use ICT-based information and evaluate its fitness for purpose	researching the principles of fitness training researching health and safety issues
ICT – Develop, present and communicate information	
Enter, develop and format information independently to suit its meaning and purpose including: <ul style="list-style-type: none"> • text and tables • images • numbers • records. 	describing the principles of fitness training describing health and safety issues producing fitness training programmes
Bring together information to suit content and purpose	describing the principles of fitness training describing health and safety issues producing fitness training programmes
Present information in ways that are fit for purpose and audience	describing the principles of fitness training describing health and safety issues producing fitness training programmes
English	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	instructing exercise and fitness sessions for clients reviewing exercise sessions
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	describing the principles of fitness training describing health and safety issues
Writing – write documents, including extended writing pieces, communicating information, ideas and opinions, effectively and persuasively	describing the principles of fitness training describing health and safety issues producing exercise programmes reviewing exercise sessions

