

Level 3 Diploma in Exercise Referral (4907- 03)

August 2012 Version 1.0



Qualification at a glance

Subject area	Exercise Referral (QCF)
City & Guilds number	4907-03
Age group approved	16-18, 19+
Entry requirements	Level 2
Assessment	Assignment
Fast track	Available
Support materials	Centre handbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number	Accreditation number
Level 3 Diploma in Exercise Referral	4907-03	600/4935/2



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1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	For Exercise and Fitness professionals looking to gain correct skills and knowledge to work in exercise referral. For learners who are interested in taking an active role in the prevention and treatment of medical conditions.
What does the qualification cover?	Designed in order for exercise referral to grow in the UK and to increase the respect for the role of the fitness professional in the prevention and treatment of medical conditions. Demand comes via the need for exercise referral instructors to be appropriately qualified and to hold the correct skills and knowledge to work in exercise referral.
Is the qualification part of a framework or initiative?	The development of this new exercise referral qualification has been developed in response to a call from the medical profession for more consistency and transparency in the skills of exercise referral instructors.
What opportunities for progression are there?	The City & Guilds Level 3 Diploma in Exercise Referral (QCF) can lead to: <ul style="list-style-type: none">• Personal Trainer• Employment working in Fitness and Health Sector• City & Guilds Level 3 qualifications in Exercise and Fitness/Personal Training• Level 4 Fitness Qualifications Progression towards Level 3/4/5 ILM Management and Leadership qualifications.

Structure

To achieve the Level 3 Diploma in Exercise Referral, learners must achieve 38 credits from the mandatory.

Level 3 Diploma in Exercise Referral

Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
D/503/7494	301	Planning exercise referral programmes with patients	8
R/503/7492	302	Understanding Medical Conditions for Exercise Referral	7
Y/503/7493	303	Professional Practice for Exercise Referral Instructors	2
L/503/7491	304	Instructing exercise with referred patients	9
A/600/9051	305	Anatomy and physiology for exercise and health	6
L/600/9054	306	Applying the principles of nutrition to a physical activity programme	6



2 Centre requirements

Approval

There is no fast track approval for this qualification, existing centres who wish to offer this qualification must use the **standard** Qualification Approval Process.

Resource requirements

Centre staffing

All Tutors, Assessors and Quality Assurance Staff must:

- Possess an exercise referral specific qualification equivalent to the qualification or units being taught / assessed or quality assured
- Possess a context specific qualification in the context of fitness being assessed or quality assured eg exercise to music, yoga
- Have relevant industry experience
- Have knowledge of and a commitment to the Exercise and Fitness Code of Ethical Practice
- Demonstrate active involvement in a process of industry relevant Continued Professional Development during the last two years (this may be discipline/ context specific or relevant to tutoring assessing or quality assurance)
- Be knowledgeable of the Active Leisure, Learning and Wellbeing framework of qualifications

Tutors

Tutors must hold, or be working towards a teaching qualification. The following are acceptable:

- Level 3 Award in Preparing to Teach in the Lifelong Learning Sector (QCF) (PTTLS)
- Level 4 Award in Preparing to Teach in the Lifelong Learning Sector (QCF) (PTTLS)
- Level 4 Certificate in Teaching in the Lifelong Learning Sector (QCF) (CTTLS)
- Level 5 Diploma in Teaching in the Lifelong Learning Sector (QCF) (DTTLS)
- Certificate in Education
- Relevant predecessor NQF tutor qualifications

Assessors

Assessors must hold or be working towards any of the following:

- Level 3 Award in Assessing Vocationally Related Achievement (QCF) or
- Level 3 Award in Assessing Competence in the Work Environment (QCF) or
- Level 3 Certificate in Assessing Vocational Achievement (QCF), or
- A1 (previously D32, D33)
- Relevant predecessor NQF assessor qualifications

Centre staff may undertake more than one role, eg tutor and assessor or internal verifier, but cannot internally verify their own assessments.

Assessors and internal verifiers

Internal Quality Assurers

Internal quality assurers must hold or be working towards any of the following:

- Level 4 Award in the Internal Quality Assurance of Assessment Processes and Practice (QCF) or
- Level 4 Certificate in Leading the Internal Quality Assurance of Assessment Processes and Practice (QCF) or
- V1 (previously D34)
- Relevant predecessor NQF internal quality assurance qualifications

(It is recommended that internal quality assurance staff also hold a relevant assessing qualification as detailed above)

External Quality Assurers

External quality assurers must hold or be working towards any of the following:

- Level 4 Award in the External Quality Assurance of Assessment Processes and Practice (QCF) or
- Level 4 Certificate in Leading the External Quality Assurance of Assessment Processes and Practice or
- V2 (previously D35)

(It is recommended that external quality assurance staff also hold a relevant assessing and internal quality assurance qualifications as detailed above)

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

Level 2 Exercise and Fitness qualifications (Gym, ETM, Aqua) 4926-02/4903-02

Without evidence of formal qualifications, candidates must demonstrate adequate prior knowledge and experience to ensure they have the potential to gain the qualification.

Age restrictions

City & Guilds cannot accept any registrations for candidates under 16 as this qualification are not approved for under 16s.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualification.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: www.cityandguilds.com/eportfolios.

City & Guilds has developed a set of *Recording forms* including examples of completed forms, for new and existing centres to use as appropriate. *Recording forms* are available on the City & Guilds website.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the external verifier, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are available on the City & Guilds website.



4 Assessment

Assessment of the qualification

This qualification is assessed in a number of ways to provide a clear indication of candidate knowledge and abilities. The types of assessments used are:

- case studies (part of an assignment)
- underpinning knowledge tests questions (part of an assignment)
- observation of practice (part of an assignment)
- on-line tests

The assessments are set by City & Guilds and are administered by the centre when the candidate is ready. They are then marked internally (with the exception of online tests), using the information provided and the outcomes recorded on the documents provided by City & Guilds. Assessments are subject to internal and external quality assurance.

City & Guilds has written the following assessments to use with this qualification:

- online multiple choice tests, using e-volve
- assignments available in an assessment pack available to download from **www.cityandguilds.com** – password available from the walled garden
- Answer pack for use with the assessment pack available from **www.cityandguilds.com** – password available from the walled garden

Level 3 Diploma in Exercise Referral

Unit Number	Unit Title	Assessment method	Where to obtain assessment materials
301	Planning exercise referral programmes with patients	Assignment	www.cityandguilds.com password available on the walled garden
302	Understanding Medical Conditions for Exercise Referral	On demand short-answer test	www.cityandguilds.com password available on the walled garden
303	Professional Practice for Exercise Referral Instructors	Assignment	www.cityandguilds.com password available on the walled garden
304	Instructing exercise with referred patients	Assignment	www.cityandguilds.com password available on the walled garden
305	Anatomy and physiology for exercise and health	Assignment	www.cityandguilds.com password available on the walled garden
306	Applying the principles of nutrition to a physical activity programme	Assignment	www.cityandguilds.com password available on the walled garden



5 Units

Availability of units

Below is a list of the learning outcomes for all the units. If you want to download a complete set of units, go to **www.cityandguilds.com**

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number
- title
- level
- credit value
- unit aim
- relationship to NOS, other qualifications and frameworks
- endorsement by a sector or other appropriate body
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria
- notes for guidance.

Unit 301

Planning exercise referral programmes with patients

UAN:	D/503/7494
Level:	Level 3
Credit value:	8
GLH:	52
Endorsement by a sector or regulatory body:	This unit is endorsed by Skills Active
Aim:	This unit covers the knowledge to gain an understanding in the planning and preparing for exercise referral schemes for both individuals and groups. This will be achieved by setting SMART targets, consideration of equipment choice, considerations for the exercise environment and any medication that is relevant. The learner will also need to consider the importance of working with other professionals in setting targets and completing correct documentation and consent forms.

Learning outcome
The learner will: 1. Understand how to prepare for exercise referral programmes
Assessment criteria
The learner can: 1.1 Describe a range of resources required to deliver exercise referral programmes for individuals and groups, including: <ul style="list-style-type: none">• environment for the session• portable equipment• fixed equipment 1.2 Explain how to work in environments that are not specifically designed for exercise/physical activity

Range
1.2 <ul style="list-style-type: none"> • Outdoors • Home • GP Surgeries • Clinics

Learning outcome
The learner will: 2. Understand the importance of long term behaviour change for exercise referral patients
Assessment criteria
The learner can: 2.1 Explain why it is important for patients to understand the health benefits of structured exercise referral programmes 2.2 Explain why it is important for an exercise referral instructor to work together with patients to agree goals, objectives, programmes and adaptations 2.3 Explain the importance of long-term behaviour change in developing patients health and fitness 2.4 Explain how to encourage patients to commit themselves to long-term change

Range
2.1 <ul style="list-style-type: none"> • Adherence to exercise programmes • Patient motivation • Overcome barriers 2.2 <ul style="list-style-type: none"> • Empowerment • Structure • SMART targets 2.3 <ul style="list-style-type: none"> • Health benefits • Condition control • Impact on primary and secondary care 2.4 Highlight long term benefits including: <ul style="list-style-type: none"> • Personal • Social • Health

Learning outcome
<p>The learner will:</p> <p>3. Understand the principles of collecting information to plan an exercise referral programme</p>
Assessment criteria
<p>The learner can:</p> <p>3.1 Explain the principles of informed consent</p> <p>3.2 Summarise the patient information that should be collected when designing an exercise referral programme</p> <p>3.3 Explain how to select the most appropriate methods of collecting patient information according to patient need</p> <p>3.4 Explain how to interpret information collected from the patient in order to identify patient needs and goals</p> <p>3.5 Explain the legal and ethical implications of collecting patient information</p>

Range
<p>3.1</p> <ul style="list-style-type: none"> • Patient must have all the facts • Information is freely given • Patient must make the decision <p>3.2</p> <ul style="list-style-type: none"> • Medication • Family history • Exercise history • Barriers • SMART targets • Likes/dislikes • Health screening data <p>3.3</p> <ul style="list-style-type: none"> • Written • Verbal • PARQ • Consent form • Referral letter/advice • IPAQ • ED5Q <p>3.4</p> <ul style="list-style-type: none"> • Lifestyle • Health and fitness appraisal • Normative data <p>3.5</p> <ul style="list-style-type: none"> • Data protection act • Health and social care act

Learning outcome
The learner will: 4. Understand how to identify health related fitness goals with exercise referral patients
Assessment criteria
The learner can: 4.1 Explain how to identify patients' short, medium and long term goals 4.2 Identify when exercise referral instructors should involve others, apart from their patients, in goal setting 4.3 Explain how to use specific, measurable, achievable, realistic and time bound (SMART) objectives in an exercise referral programme

Range
<p>4.1</p> <ul style="list-style-type: none"> • Client appraisal • Targets from GP <p>4.2</p> <ul style="list-style-type: none"> • Potential risk of an exercise programme • Carers • Family and friends <p>4.3</p> <ul style="list-style-type: none"> • Agreed with patient • Motivational tool

Learning outcome
The learner will: 5. Understand how to plan an exercise referral programme with patients
Assessment criteria
The learner can: 5.1 Explain the absolute contraindications to exercise 5.2 Summarise the key principles of designing exercise referral programmes to achieve short, medium and long term goals, including the order and structure of sessions 5.3 Describe a range of safe and effective exercises/physical activities to develop: <ul style="list-style-type: none"> • cardiovascular fitness • muscular fitness • flexibility • motor skills • core stability 5.4 Explain how to include physical activities as part of patient's lifestyle to complement exercise sessions 5.5 Identify when it might be appropriate to share the programme with other professionals

Range
<p>5.1</p> <ul style="list-style-type: none">• Relate to specific conditions but also include• Unstable angina• Unstable diabetes• Tachycardia• Unstable or acute heart failure• Unstable hypertension <p>5.2</p> <ul style="list-style-type: none">• Micro/meso/macro cycles• Active rest weeks• Periodisation• Progression/regression <p>5.3</p> <ul style="list-style-type: none">• Cardiovascular fitness• Walking• Water aerobics• Cycling• muscular fitness• Weight bearing activities• Resistance training• Flexibility• Passive• Active• PNF• Relaxation classes e.g. Yoga• Motor skills• Balance dynamic/static• Walking• Core stability• Basic Pilates moves including ball and balance training <p>5.4</p> <ul style="list-style-type: none">• ADL• Home exercise• Family activities <p>5.5</p> <ul style="list-style-type: none">• If symptoms persist• Exercise causes pain or discomfort• Relapse• If programme is not working• If moving client onto another centre, instructor or classes/ session

Learning outcome
The learner will: 6. Understand how to adapt an exercise referral programme with patients
Assessment criteria
<p>The learner can:</p> <p>6.1 Explain how the principles of training can be used to adapt the programme where:</p> <ul style="list-style-type: none"> • goals are not being achieved • new goals have been identified <p>6.2 Describe appropriate training systems and their use in providing variety and in ensuring programmes remain effective</p> <p>6.3 Explain why it is important to keep accurate records of changes including the reasons for change</p> <p>6.4 Explain when it may be appropriate to share changes to exercise referral programmes with other professionals</p>

Range
<p>6.1</p> <ul style="list-style-type: none"> • Increase/decrease intensity • Modify programme • Change exercise preferences • Increase FIT <p>6.2</p> <ul style="list-style-type: none"> • Relate to specific condition • Relate to new physical activity guidelines <p>6.3</p> <ul style="list-style-type: none"> • Instructor can refer to data to inform planning • Keep record of progress • Monitor condition <p>6.4</p> <ul style="list-style-type: none"> • Approval from Medical practitioners • Change in fitness and health

Learning outcome
The learner will: 7. Be able to collect information about exercise referral patients
Assessment criteria
The learner can: 7.1 Establish a rapport with patients 7.2 Explain own role and responsibilities to patients 7.3 Collect the information needed to plan an exercise referral programme using methods appropriate to the patients and their condition/s 7.4 Show sensitivity and empathy to patients and the information they provide 7.5 Record the information using appropriate formats in a way that will aid analysis 7.6 Treat confidential information correctly

Range
<p>7.1</p> <ul style="list-style-type: none"> • Respect • Trust • Motivation • Adherence <p>7.2</p> <ul style="list-style-type: none"> • Boundaries • Expectations • Professionalism <p>7.3</p> <ul style="list-style-type: none"> • Health and fitness data • Medication • Exercise history • Family history <p>7.4</p> <ul style="list-style-type: none"> • Knowledge of condition <p>7.5</p> <ul style="list-style-type: none"> • Data base • Relevant software (e.g. Fitech system) <p>7.6</p> <ul style="list-style-type: none"> • Data Protection • Password protected (encrypted) ?? • Caldicott principles

Learning outcome
The learner will: 8. Be able to agree goals with exercise referral patients
Assessment criteria
The learner can: 8.1 Work with patients to agree short, medium and long-term goals appropriate to their needs 8.2 Ensure the goals are: <ul style="list-style-type: none"> • specific, measurable, achievable, realistic and time bound • consistent with industry good practice 8.3 Agree with patients their needs and readiness to participate

Range
8.1 <ul style="list-style-type: none"> • Via exercise counselling • Appraisals 8.2 <ul style="list-style-type: none"> • Related to specific condition 8.3 <ul style="list-style-type: none"> • Prochaska & Declemente stage of readiness • PARQ • Motivational interviewing

Learning outcome
The learner will: 9. Be able to plan an exercise referral programme with exercise referral patients
Assessment criteria
The learner can: 9.1 Plan specific outcome measures, stages of achievement and exercises/physical activities that are: <ul style="list-style-type: none"> • appropriate to patients' medical condition/s, goals and level of fitness • consistent with accepted good practice 9.2 Ensure appropriate components of fitness are built into the programme 9.3 Apply the principles of training which are appropriate to exercise referral patients and their condition/s to help achieve short, medium and long term goals

- 9.4 Agree the demands of the programme with patients
- 9.5 Agree a timetable of sessions with patients
- 9.6 Agree appropriate evaluation methods and review dates with patients
- 9.7 Identify the resources needed for the programme, including the use of environments not designed for exercise
- 9.8 Record plans in a format that will help patients and other professionals involved to implement the programme
- 9.9 Agree how to maintain contact with exercise referral patients between sessions

Range

9.1

- Analysis of information collected.
- Keeping up to date with current guidelines

9.2

- Flexibility
- MSE
- Aerobic endurance
- Functional activities

9.3

- Specificity
- Overload
- Progression
- Adaptation
- Reversibility

9.4

- Informed consent

9.5

- Time management
- Friends and Family support
- Child care issues
- Affordability

9.6

- Health and fitness assessments

9.7

- Indoor
- Outdoors
- Clinics/surgeries
- Balance/stability balls
- Mats

- Resistance bands
- Hand weights
- Machine/free weights
- Exercise intensity monitors (RPE, HR monitor)

9.8

- Suitable programme cards

9.9

- Email
- Phone
- Text
- Media (e.g. twitter/facebook)

Learning outcome

The learner will:

10. Be able to manage an exercise referral programme with patients

Assessment criteria

The learner can:

- 10.1 Monitor integration of exercise referral programme and wider physical activity
- 10.2 Provide alternatives to the programmed exercises/physical activities if patients cannot take part as planned
- 10.3 Monitor patients' progress using appropriate methods
- 10.4 Write a letter to a healthcare professional communicating appropriate information and using accurate language

Range

10.1

- Exercise diary
- Programme cards

10.2

- Lower impact activities
- Use different environments
- Alternative equipment

10.3

- Health screening results
- Patient feedback
- Programme cards

Learning outcome
The learner will: 11. Be able to review progress with exercise referral patients
Assessment criteria
The learner can: 11.1 Explain the purpose of reviewing progress to patients 11.2 Review short, medium and long term goals with patients at agreed points in the programme, taking into account any changes in circumstances 11.3 Encourage patients to give their own views on progress 11.4 Use suitable methods of evaluation that will help to review patient progress against goals and initial baseline data 11.5 Give feedback to patients during their review that is likely to strengthen their motivation and adherence 11.6 Agree review outcomes with patients and other professionals 11.7 Keep an accurate record of reviews and their outcome

Range
<p>11.1</p> <ul style="list-style-type: none"> • Monitor progress • Progress/regress the programme • Targets achieved • Improvement/change in conditions <p>11.2</p> <ul style="list-style-type: none"> • Reinforce targets • Monitor effectiveness of programme • Changes in condition • Attendance/retention <p>11.3</p> <ul style="list-style-type: none"> • Discussion during supervised training sessions (on-going analysis) • Regular appraisals <p>11.4</p> <ul style="list-style-type: none"> • Fitness testing • Repeat body measurements • Repeat HAD / IPAQ /ED-5Q • WMWEBS <p>11.5</p> <ul style="list-style-type: none"> • Positive feedback • Highlight strengths • Target areas to improve using realistic targets • Highlight achievements

Learning outcome
The learner will: 12. Be able to adapt an exercise referral programme with patients
Assessment criteria
<p>The learner can:</p> <p>12.1 Identify goals and exercises/physical activities that need to be redefined or adapted</p> <p>12.2 Agree adaptations, progressions or regressions to meet patients' needs to optimise achievement</p> <p>12.3 Identify and agree any changes to resources and environments with the patient</p> <p>12.4 Introduce adaptations in a way that is appropriate to patients, their needs and medical condition/s</p> <p>12.5 Record changes to programme plans to take account of adaptations</p> <p>12.6 Monitor the effectiveness of adaptations and update the programme as necessary</p>

Range
<p>12.1</p> <ul style="list-style-type: none"> • Adapt / redefine activity for the following reasons: • Change in medication • Change in fitness level • Change in health status • Environmental considerations (eg weather) <p>12.2</p> <ul style="list-style-type: none"> • If programme not producing results • Exercise/activity causes discomfort or pain • Poor attendance on programme • Progression in condition (e.g. pregnancy) • Change in health status <p>12.3</p> <ul style="list-style-type: none"> • Home • Outdoors • Time • Indoors <p>12.4</p> <ul style="list-style-type: none"> • Ensure patients wellbeing and safety • Adapt in line with physical changes including postural changes <p>12.5</p> <ul style="list-style-type: none"> • Accountability • Monitoring <p>12.6</p> <ul style="list-style-type: none"> • Ensure changes are relevant • Reinforcement of changes to programme within national guidelines

Unit 301 Planning exercise referral programmes with patients

Supporting information

Guidance

Assessment Guidance Refer to Level 3 Exercise Referral Assessment Strategy developed by SkillsActive.

Learning outcome 3 should include the following;

- Referral form
- Informed consent to participate and transfer medical information
- Medical and surgical history
- Medications
- Physical activity history
- Physical activity preferences
- Motivation and barriers to participation
- Current fitness level
- Stage of readiness
- Personal and behavioural goals
- Physical measurements

Learning outcome 4 should include the following;

- Medical management
- General health and fitness
- Physiological
- Psychological
- Lifestyle
- Social
- Functional ability

Unit 302

Understanding Medical Conditions for Exercise Referral

UAN:	R/503/7492
Level:	Level 3
Credit value:	7
GLH:	35
Endorsement by a sector or regulatory body:	This unit is endorsed by Skills Active
Aim:	This unit covers the knowledge to gain an understanding of the medical conditions that will be encountered when work with referral groups. The learner will show an understanding of recognising signs and symptoms of a range of medical conditions, the potential side effects of medication and the effect on exercise potential. The learner will also gain an understanding of the benefits of exercise across a range of medical conditions.

Learning outcome
The learner will: 1. Understand the clinical features of medical conditions relevant to exercise referral programmes
Assessment criteria
The learner can: 1.1 Describe the pathophysiology, and clinical signs and symptoms of specified medical conditions 1.2 Describe how pathophysiology, and clinical signs and symptoms change with progression of specified medical conditions 1.3 Describe the common causes of specified medical conditions

Range

1.1

- Asthma - COPD
- Obesity
- Diabetes
- Pregnancy
- Hypertension

Older Adult

- Strokes
- CHD / CVD

1.2

Asthma

- Immune system - allergic cascade
 - Sensitization
 - Early phase response
 - Late Phase response
- Triggers allergens
- Bronchoconstriction
- Inflammation
- IgE (Immunoglobulin E)
- Airway remodelling

Obesity

- intra-abdominal fat accumulation
- increase in waist circumference
- tiredness,
- breathlessness,
- back pain,
- arthritis,
- sweatiness,
- sleep apnoea
- depression
- menstrual disorders
- Metabolic diseases which include
 - diabetes,
 - hyperlipidaemia
 - hypertension
- stroke and several major cancers

Diabetes Melitus

Pathophysiology:

- autoimmune destruction of pancreatic beta cells
- pancreas no longer produces insulin
- dependent on exogenously administered insulin

- susceptible to diabetic ketoacidosis

Type 2

- peripheral resistance to insulin, especially in muscle cells;
- increased production of glucose by the liver
- altered pancreatic insulin secretion
- hyperinsulinemia
- Insulin production and secretion are altered
- hyperglycemia.
- if insulin is secreted from the pancreas but is not used properly by target cells
- If insulin secretion is increased, blood glucose levels may become very low (hypoglycemia) as large amounts of glucose enter tissue cells and little remains in the bloodstream.
- Nerve damage to extremities

Symptoms of hyperglycemia:

- Intense thirst
- Urination
- Drowsiness
- Sweet smell on breath

Symptoms of hypoglycaemia:

- pallor
- sweating
- shakiness
- dizziness
- faintness
- blurred vision
- slurred speech / “drunk appearance”

Hypertension

- increased cardiac output plus increased peripheral vascular resistance.
- renal disease,
- endocrine disorders,
- coarctation of the aorta
- enlarged heart
- heart failure

Pregnancy & older adult

Pregnancy:

Need to include effects of relaxin on joint stability

- heat tolerance
- Postural deviation (lordosis)
- Hyper/hypotension

Older adult:

- heat tolerance
- co-ordination
- response time
- bone density
- muscle mass
- strength & flexibility
- Comorbidities

1.3

- Diet/lifestyle
- Genetics
- Smoking

Learning outcome

The learner will:

2. Know the accepted methods for treatment and management of medical conditions relevant to exercise referral programmes

Assessment criteria

The learner can:

- 2.1 Using a range of credible sources, identify the common drug, surgical or therapeutic interventions used to treat specified medical conditions
- 2.2 Describe the desired effects, and side effects, of common medications on the patients exercise response for specified medical conditions
- 2.3 Describe how lifestyle modification, including nutrition and physical activity changes, can be used in addition to medical therapies for specified medical conditions

Range**2.1**

- Diuretics
- Calcium Channel Blockers
- ACE inhibitors
- BETA Blockers
- Bronchodilators
- Statins
- Lipid regulating drugs
- Insulin producing drugs
- Aspirin
- Warfarin
- Gastric band (Bariatric surgery)
- PCI
- CABG

2.2

Asthma

Fast/short acting bronchodilators

- Quickly dilates the bronchi of the lungs
- Side effects - nervous tension, headache, tachycardia, palpitations
- Slow/long acting bronchodilators
- Long lasting dilation the bronchi of the lungs
- Side effects - nervous tension, headache, tachycardia, palpitations

Corticosteroids

- Reduces airway inflammation
- Side effects -
- Skin thinning
- Bone mineral loss
- exercise response - Tachycardia - need GP approval before exercise programme

Obesity

- Anti-obesity drugs -
- What it does - reduces the absorption of fat
- Side effects - loose stools, incontinence, flatulence
- Appetite suppressants
- Side effects - Constipation, nausea, tachycardia, hypertension, sweating headache, anxiety, palpitations, insomnia, dry mouth
- Exercise response - effects the type of exercise prescribed (hypertension), Tachycardia - need GP approval before exercise programme

Pregnancy – relate to any pregnancy induced problems

Hypertension

- Angiotensin-converting enzyme (ACE) inhibitors
- Angiotensin II receptor blockers (ARBs)
- Diuretics
- Beta-blockers
- Calcium channel blockers
- Alpha-blockers
- Alpha-agonists
- Renin inhibitors
- Combination medication

2.3

Asthma

- smoking cessation
- avoid mucus producing foods
- avoid known triggers (cold dry air, warm moist air, air pollutant)

Obesity

- dietary changes
- increased physical activity
- increased ADL

Diabetes

- dietary changes
- increased physical activity

Pregnancy

- Regulated water intake
- follow approved diet
- excluding certain foods and moderate alcohol intake
- Moderate physical activity avoiding contact sports
- high HR and impact
- No developmental stretching.

Hypertension:

- Weight loss
- Smoking cessation
- Healthy diet including
- More fruit and vegetables
- Reduce saturated fat
- Reduce sodium
- Regular exercise
- Limiting alcohol

Older Adult:

- Weight bearing activity
- Increase functional skills
- Increase flexibility activities
- Active lifestyle
- Diet geared towards healthy bones

Learning outcome

The learner will:

3. Understand the relationship between exercise and specified exercise referral medical conditions

Assessment criteria

The learner can:

- 3.1 Explain the risks of exercise for patients with specified medical conditions
- 3.2 Explain how exercise can benefit patients with specified medical conditions
- 3.3 Evaluate the risks of exercise against the benefits for patients with specified medical conditions

Range

3.1

Asthma

- smoking cessation
- avoid mucus producing foods
- avoid known triggers (cold dry air, warm moist air, air pollutant)

Obesity

- dietary changes
- increased physical activity
- increased ADL

Diabetes

- dietary changes
- increased physical activity

Pregnancy

- Regulated water intake
- follow approved diet
- excluding certain foods and moderate alcohol intake
- Moderate physical activity avoiding contact sports
- high HR and impact
- No developmental stretching.

Hypertension:

- Weight loss
- Smoking cessation
- Healthy diet including
- More fruit and vegetables
- Reduce saturated fat
- Reduce sodium
- Regular exercise
- Limiting alcohol

Older Adult:

- Weight bearing activity
- Increase functional skills
- Increase flexibility activities
- Active lifestyle
- Diet geared towards healthy bones

3.2

Asthma

- smoking cessation
- avoid mucus producing foods

- avoid known triggers (cold dry air, warm moist air, air pollutant)

Obesity

- dietary changes
- increased physical activity
- increased ADL

Diabetes

- dietary changes
- increased physical activity

Pregnancy

- Regulated water intake
- follow approved diet
- excluding certain foods and moderate alcohol intake
- Moderate physical activity avoiding contact sports
- high HR and impact
- No developmental stretching.

Hypertension:

- Weight loss
- Smoking cessation
- Healthy diet including
- More fruit and vegetables
- Reduce saturated fat
- Reduce sodium
- Regular exercise
- Limiting alcohol

Older Adult:

- Weight bearing activity
- Increase functional skills
- Increase flexibility activities
- Active lifestyle
- Diet geared towards healthy bones

3.3

Asthma

- smoking cessation
- avoid mucus producing foods
- avoid known triggers (cold dry air, warm moist air, air pollutant)

Obesity

- dietary changes
- increased physical activity

- increased ADL

Diabetes

- dietary changes
- increased physical activity

Pregnancy

- Regulated water intake
- follow approved diet
- excluding certain foods and moderate alcohol intake
- Moderate physical activity avoiding contact sports
- high HR and impact
- No developmental stretching.

Hypertension:

- Weight loss
- Smoking cessation
- Healthy diet including
- More fruit and vegetables
- Reduce saturated fat
- Reduce sodium
- Regular exercise
- Limiting alcohol

Older Adult:

- Weight bearing activity
- Increase functional skills
- Increase flexibility activities
- Active lifestyle
- Diet geared towards healthy bones

Learning outcome

The learner will:

4. Understand how to programme safe, effective exercise programmes for patients with specified exercise referral medical conditions

Assessment criteria

The learner can:

- 4.1 Outline exercise guidelines and restrictions for patients with specified medical conditions
- 4.2 Identify considerations for exercise when dealing with co-morbidities

Range

Asthma

Aerobic

- Frequency=3-5 days per week
- Intensity = low to high
- Duration= 20-30 mins
- Activity = Large muscle group activities (e.g. X trainer) interval/continuous
- Contraindications - High intensity exercise, exercising in cold dry air, outdoor training (pollens and grasses) - absence of clients bronchodilator

Resistance Training

- Frequency=2-3 days per week
- Intensity = Low resistance (endurance based conditioning)
- Duration= 15 - 20 reps
- Activity = 8-10 exercises which include all major muscle groups
- Contraindications - absence of clients bronchodilator,

Obesity

Aerobic

- Frequency=2-5 days per week
- Intensity = Non or partial weight bearing - low to moderate impact (12-16 RPE)
- Duration= 20-60 mins
- Activity = Large muscle group activities (e.g. X trainer) interval/continuous
- Contraindications - Isometric exercises
- High impact exercises

Resistance Training

- Frequency=2-5 days per week
- Intensity = Volitional fatigue or after 2-3 reps before volitional fatigue (16 RPE)
- Duration= 1-3 sets of 10-15 reps
- Activity = 8-10 exercises which include all major muscle groups
- Contraindications - Isometric exercises

Diabetes

Aerobic

- Frequency=4-7 days per week
- Intensity = Low to Moderate
- Duration= 20-60 mins
- Activity - Large muscle activities
- Contraindications - loosen foot straps if relevant, prolonged exercise

can cause hypoglycaemia, diabetes must be treated and stable,

- Absolute contraindications - pre exercise blood glucose of 13.8 mmol/l with urinary ketones, pre exercise blood glucose of 16 mmol/l

Resistance Training

- Frequency=Minimum of 2 times per week with at least 48 hours recovery
- Intensity = Low resistance (40%-60% 1RM)
- Duration= 1-3 sets 10-12 reps

Pregnancy

Aerobic

- Frequency=2-3 days per week
- Intensity = Low to Moderate
- Duration= 20-60 mins
- Activity - Large muscle activities, low or non impact
- Contraindications - Prone exercises in 2nd and 3rd trimesters due to blood return to the heart, hyperextension/flexion, ballistic movements.
- Absolute Contraindications - Heart disease, ruptured membranes, Premature labour, multiple gestation, placenta praevia, incompetent cervix, history of spontaneous abortions
- Relative contraindications - Hypertension, anaemia, endocrine disorder, diabetes, obesity, malnutrition, history of premature labour, intra-uterine growth retardation, ante-partum haemorrhage, extremely unfit

Hypertension

Aerobic

- Frequency=3-7 days per week
- Intensity = Low to moderate
- Duration= 30-60 mins
- Activity = Large muscle group activities (e.g. X trainer) continuous
- Contraindications - avoid early morning exercise

Resistance Training

- Frequency=2-3 days per week
- Intensity = Low
- Duration= 10-15 reps, 1-3 circuits
- Activity = Circuit type training
- Contraindications - avoid early morning exercise, isometric training, overhead resistance training, very heavy weights, valsalva

Older Adult

Aerobic

- Frequency=3-5 days per week
- Intensity = Low to moderate
- Duration= 5-60 mins
- Activity = Large muscle group activities (e.g. walking, cycling swimming)

Resistance Training

- Frequency=3 days per week
- Intensity = Low
- Duration= 10-20 mins
- Activity = Free and machine weights, balance ball, flexi bands and chair activities
- Contraindications - Drug effects if applicable, medical complications, increased risk of injury, reduced mobility, ballistic activities, valsalva, isometric contractions

Unit 302 Understanding Medical Conditions for Exercise Referral

Supporting information

Guidance

Where assessment criteria refer to medical conditions learners must cover ALL of the following;

- Hypertension
- Hypercholesterolaemia
- Chronic Obstructive Pulmonary disease
- Asthma
- Obesity
- Diabetes type 1 and 2
- Osteoarthritis
- Rheumatoid arthritis
- Osteoporosis •Depression
- Stress
- Anxiety
- Simple mechanical back pain
- Joint replacement

UAN:	Y/503/7493
Level:	Level 3
Credit value:	2
GLH:	14
Endorsement by a sector or regulatory body:	This unit is endorsed by Skills Active
Aim:	<p>This unit covers the knowledge to gain an understanding of the professional practices in referral schemes and key government policies regarding the referral schemes. The learner will also gain an understanding of the roles of the medical, health, and fitness professionals in an exercise referral scheme whilst gaining an understanding of the importance of monitoring client data and the importance of confidentiality.</p>

Learning outcome
<p>The learner will:</p> <ol style="list-style-type: none"> 1. Understand the role and importance of exercise referral and related policies and key documents
Assessment criteria
<p>The learner can:</p> <ol style="list-style-type: none"> 1.1 Explain the role of exercise referral in both the fitness industry and the health sector 1.2 Evaluate the general role of exercise in disease risk reduction and condition management 1.3 Outline the key points of government policies relating to exercise referral schemes 1.4 Outline key points from the Professional and Operational Standards for exercise referral

Range
<p>1.1</p> <ul style="list-style-type: none"> • collecting and recording information relating to individual patients • Carry out appropriate pre-exercise readiness screening • Match patients to state of change and select appropriate models to enhance positive behaviour change. • Assess, monitor and manage controllable risk to patients • Identifying, agreeing and reviewing SMART targets • Promoting a range of physical activity opportunities relevant to the patient • Adapting, designing and delivering exercise which is appropriate. • Educating patients about exercise contraindications, risks and special considerations that need to be taken in to account for their condition <p>1.2</p> <ul style="list-style-type: none"> • Initiate a lifestyle change to improve health • Benefits of exercise • Effects of exercise on specific conditions • Evaluate the risk of physical activity and exercise on specific conditions • Select recommended/appropriate activities for specific conditions <p>1.3</p> <ul style="list-style-type: none"> • Increase long term physical activity (National Guidelines) • Reduce morbidity <p>1.4 NQAF</p>

Learning outcome
<p>The learner will:</p> <p>2. Understand roles and responsibilities within an exercise referral scheme</p>
Assessment criteria
<p>The learner can:</p> <p>2.1 Explain the roles of the medical, health, and fitness professionals in an exercise referral scheme</p> <p>2.2 Define the fitness professionals scope of practice and the inter-professional boundaries within an exercise referral scheme</p> <p>2.3 Describe how to deal with a patient who has a medical condition outside the scope of practice of the exercise referral instructor</p> <p>2.4 Explain when to refer to other professionals including the original referrer</p> <p>2.5 Explain how to determine ‘inappropriate referrals’</p> <p>2.6 Explain the importance of not accepting a patient who has been declined a referral for exercise from their medical practitioner or health professional</p> <p>2.7 Explain the importance of effective inter-professional communication</p>

Range
2.1 <ul style="list-style-type: none">• Monitor progress• Prescription of medication• Initial referral• Health and fitness data collation• Completion of active and passive health tests• Prescription of exercise programme• Pathways between health, fitness, primary and secondary care 2.2 <ul style="list-style-type: none">• Client confidentiality• Regular conversation 2.3 <ul style="list-style-type: none">• Non advisory role in relation to medical conditions• Advising against medical advice• Advise of competence and boundaries• Refer to relevant qualified professional ie back to GP 2.4 <ul style="list-style-type: none">• If condition worsens/betters• No signs of improvement• Danger of relapse• Low/non attendance• New symptoms 2.5 <ul style="list-style-type: none">• When exercise which may be completely contraindicative to the individual's health and wellbeing.• Referral to professional without relevant qualifications 2.6 <ul style="list-style-type: none">• Absolute contraindications• Exercise could be a risk to health• Don't overrule decisions made by medical practitioners• Threat of professional liability claims• Damage professional relationship with referrer 2.7 <ul style="list-style-type: none">• Adequate communication between professionals• Understanding of medical terminology• Inaccurate information may result in a prescribed course of action which may be detrimental to the client/individuals health and wellbeing

Learning outcome
The learner will: 3. Understand the current healthcare systems in the UK
Assessment criteria
The learner can: 3.1 Describe the role of Clinical Commissioning Groups 3.2 Identify key health service documents/ policies and their impact on the health care system in relation to exercise referral

Range
3.1 <ul style="list-style-type: none"> From 1 April 2013 Clinical Commissioning Groups will make most of the decisions about local health services, led by local GPs and other clinical staff. 3.2 <ul style="list-style-type: none"> NQAF Reduce obese related illness and co-morbidities. BP guidelines PA guidelines

Learning outcome
The learner will: 4. Understand the exercise referral process
Assessment criteria
The learner can: 4.1 Explain the process of receiving a referred patient from a healthcare professional 4.2 Describe the protocol for an initial patient consultation with the exercise referral instructor 4.3 Describe the principles of patient monitoring and data collection 4.4 Outline the medico-legal requirements relevant to the exercise referral instructor job role

Range
<p>4.1</p> <ul style="list-style-type: none">• referral by the healthcare professional• agreement of the patient to be referred• response of the service coordinator or individual exercise referral instructor• planning the programme• Delivering the programme• patient monitoring and data collection• exit strategy• reporting to the referring healthcare professional <p>4.2</p> <ul style="list-style-type: none">• Patient consent• Physical Assessment & state of change• Goal setting (long, medium and short)• Discuss the programme• Gain commitment from patient <p>4.3</p> <ul style="list-style-type: none">• Quantitative data• Qualitative data• Attendance• Baseline data <p>4.4</p> <ul style="list-style-type: none">• Be insured• Have CPR cert• Comply with data protection• Comply with confidentiality requirements• Adhere to occupational standards• Accurate record keeping to avoid claim being made against a fitness instructor, an exercise referral service or an operator.• GMC - good medical practice• QCC

Learning outcome
The learner will: 5. Understand the principles and procedures of record keeping
Assessment criteria
The learner can: 5.1 Explain how patient confidentiality is maintained in an exercise referral scheme 5.2 Explain the concept of data protection 5.3 Explain the meaning of validity and reliability in relation to measurement of techniques and outcomes 5.4 Explain how to evaluate the quality and reliability of evidence

Range
<p>5.1</p> <ul style="list-style-type: none"> • L2 emails • Data base • Lockable offices and cabinets • E referrals • Internal post • Password protected <p>5.2</p> <ul style="list-style-type: none"> • Patient confidentiality • No access for third parties • Patients consent/dignity <p>5.3</p> <ul style="list-style-type: none"> • Validity – tests actually measure what they set out to • Reliability – results are consistent and reproducible over time <p>5.4</p> <ul style="list-style-type: none"> • Compare against normative data • National/international Recognised data

Learning outcome
The learner will: 6. Understand the concept of a patient centred approach
Assessment criteria
The learner can: 6.1 Explain how verbal and non-verbal communication, appearance and body language can influence patients' perception 6.2 Describe a range of consulting skills 6.3 Explain the term 'health behaviours' 6.4 Explain locus of control

Range
<p>6.1</p> <ul style="list-style-type: none"> • Feeling comfortable • Respect/professionalism • Non judgemental • Can cause lack of confidence • Develop rapport and sense of trust with instructor <p>6.2</p> <ul style="list-style-type: none"> • Communication • Questioning • Feedback • Implementation of information/data • Evaluation • Interpersonal • Management <p>6.3</p> <ul style="list-style-type: none"> • A persons health beliefs • Action taken by a person to maintain, attain, or regain good health and to prevent illness <p>6.4</p> <ul style="list-style-type: none"> • Aspect of personality • Internal locus of control • External locus of control

Learning outcome
<p>The learner will:</p> <p>7. Understand how to monitor a successful exercise referral scheme</p>
Assessment criteria
<p>The learner can:</p> <p>7.1 Describe techniques to monitor success for the patient and the scheme</p> <p>7.2 Describe the importance of monitoring and evaluation in exercise referral</p>

Range
<p>7.1</p> <p>Patient:</p> <ul style="list-style-type: none"> • Refer to SMART targets • Follow up appointments • Exit data • Post exit follow up <p>Scheme:</p> <ul style="list-style-type: none"> • Registers to show adherence • Number of referrals and completions • Retention • Q&Q data • Evaluation & feedback • Identify targets achieved on service level agreement. <p>7.2</p> <p>Patient adherence</p> <ul style="list-style-type: none"> • Development and adaptation of the programme • Support for funding & re-commissioning • Quality assurance

Learning outcome
<p>The learner will:</p> <p>8. Understand the principles of risk stratification in exercise referral</p>
Assessment criteria
<p>The learner can:</p> <p>8.1 Describe the principles of risk stratification</p> <p>8.2 Explain the current use of risk stratification tools used in exercise referral</p>

Range
<p>8.1</p> <ul style="list-style-type: none"> • identification of morbidities in terms of low, medium and high risk <p>8.2</p> <ul style="list-style-type: none"> • Risk assessment pyramid • PARQ • Irwin and Morgan assessment • BACPR Risk strategy

Unit 304

Instructing exercise with referred patients

UAN:	L/503/7491
Level:	Level 3
Credit value:	9
GLH:	58
Endorsement by a sector or regulatory body:	<p>This unit is endorsed by Skills Active</p> <p>This unit covers the knowledge to gain an understanding of the importance of different communication methods and the importance of using motivational tools to ensure client adherence to the exercise programme. The learner will use different coaching styles which reflect the clients wants and needs and use relevant methods to monitor progression and perceived exertion. The learner will also gain an understanding of how and when to adapt, progress and regress exercise programmes due to clients responses and how to deliver safe and effective exercises for each individual client.</p>

Learning outcome
The learner will: 1. Understand how to instruct exercise to exercise referral patients
Assessment criteria
The learner can: 1.1 Explain the importance of verbal and non-verbal communication when instructing patients 1.2 Describe how to adapt communication to meet patients' needs 1.3 Evaluate different methods of maintaining patients' motivation, especially when patients are finding exercises difficult 1.4 Explain the importance of correcting patient technique

Range
<p>1.1</p> <p>Body language</p> <ul style="list-style-type: none"> • facial expressions • gestures • eye contact • posture • Build Confidence • Establish clients learning style • Establish communication barriers <p>1.2</p> <ul style="list-style-type: none"> • Verbal • Non-verbal • Written • Listening • Open and closed questions • Adapt teaching style according to individual learning style <p>1.3</p> <ul style="list-style-type: none"> • Praise and feedback • Show empathy or understanding • Use of SMART targets • Encouragement • Choice of instructing style <p>1.4</p> <ul style="list-style-type: none"> • Client safety • Beneficial for unsupervised programmes • Improving posture and alignment • Increasing the effectiveness of the exercise

Learning outcome
<p>The learner will:</p> <ol style="list-style-type: none"> 2. Understand how to adapt exercise to meet the needs of exercise referral patients
Assessment criteria
<p>The learner can:</p> <ol style="list-style-type: none"> 2.1 Explain why it is important to monitor individual progress if more than one patient is involved in the session 2.2 Describe different methods of monitoring patients' progress during exercise, including groups of patients 2.3 Explain when it may be necessary to adapt planned exercises to meet patients' needs 2.4 Explain how to adapt exercise/exercise positions as appropriate to individual patients and the environment 2.5 Explain how to modify the intensity of exercise according to the needs and response of the patient

Range
<p>2.1</p> <ul style="list-style-type: none">• Treat clients as individuals• Give a sense of importance• Achievements/adaptations differ with different patients• Motivational• Levels of Support <p>2.2</p> <ul style="list-style-type: none">• Individual programme cards• Verbal questioning• Observation• RPE (BORG scales)• HR monitor (unless Beta Blockers etc prescribed)• Talk test <p>2.3</p> <ul style="list-style-type: none">• Medicinal issues• Time of day• Weather and training environment• Available equipment• Patient comfort• Availability of resources <p>2.4</p> <ul style="list-style-type: none">• Intensity of resistance• Lever length• Use of equipment (chair based)• environment considerations• Choice of exercises• Sequence of exercises• Resistance and repetitions• Number of sets• Rest between sets / sessions• Speed of movement• Type of muscle contraction• Duration of session <p>2.5</p> <ul style="list-style-type: none">• Use BORG scale• Regress exercise• Increasing/decreasing intensity• complexity of exercise• Consider client ability• Perform seated• interval training• Active recoveries (periodisation)

Learning outcome
The learner will: 3. Understand how to review exercise referral sessions with patients
Assessment criteria
<p>The learner can:</p> <p>3.1 Explain why exercise referral instructors should give patients feedback on their performance during a session</p> <p>3.2 Explain why patients should be given the opportunity to ask questions and discuss their performance</p> <p>3.3 Explain how to give patients feedback on their performance in a way that is accurate but maintains patient motivation/commitment</p> <p>3.4 Explain why patients need to see their progress against goals</p> <p>3.5 Explain why patients need information about future exercise and physical activity, both supervised and unsupervised</p>

Range
<p>3.1</p> <ul style="list-style-type: none"> • To help with incorrect technique/posture • To correct certain movements which could cause injury • To motivate patients to achieve their goals • To develop confidence in performance when exercising unsupervised • To identify if targets are met & Establish future targets and goals • To encourage rapport <p>3.2</p> <ul style="list-style-type: none"> • To acknowledge the purpose of the exercise regime • To understand the benefits • To raise any concerns / worries they may have. • To encourage ownership for the management of their own programme. • Consolidate learning • Set goals for next session <p>3.3</p> <ul style="list-style-type: none"> • Verbally • Written/programme cards/achievement /progress/attendance • Health & fitness appraisal • Using clear and simple terminology • By using constructive criticism and positive reinforcement. • Progression charts <p>3.4</p> <ul style="list-style-type: none"> • To maintain motivation • Psychological factors e.g. increased confidence <p>3.5</p> <ul style="list-style-type: none"> • Planning/Time management • Personal development • Ascertain other interests • Affordability of client

Learning outcome
The learner will: 4. Be able to prepare resources for the exercise referral sessions
Assessment criteria
The learner can: 4.1 Select a range of exercises/physical activities to help patients achieve their objectives and goals 4.2 Obtain and prepare the resources needed for planned exercises/physical activities

Range
<p>4.1</p> <p>Activities to be</p> <ul style="list-style-type: none"> • Specific • Safe • Relevant to condition • To avoid tedium/keep programme interesting and varied <p>(Cardio-respiratory) Training to include</p> <ul style="list-style-type: none"> • Warm up/ Cool down/ Interval/Fartlek • Muscular strength • Muscular endurance • Flexibility training • Balance – static and dynamic • Co-ordination • PNF • Wellbeing – e.g. Yoga, <p>4.2</p> <ul style="list-style-type: none"> • Environment for the session • Portable equipment • Fixed equipment

Learning outcome
The learner will: 5. Be able to prepare patients for exercise referral sessions
Assessment criteria
<p>The learner can:</p> <p>5.1 Help patients feel at ease in the exercise environment</p> <p>5.2 Explain the planned objectives and exercises/physical activities to patients</p> <p>5.3 Explain to patients how objectives and exercises/physical activities support their goals and are appropriate to their condition</p> <p>5.4 Explain the physical and technical demands of the planned exercises/physical activities to patients</p> <p>5.5 Explain to patients how planned exercise/physical activity can be progressed or regressed to meet their goals</p> <p>5.6 Assess patients' state of readiness and motivation to take part in the planned exercises/physical activities</p> <p>5.7 Negotiate and agree with patients any changes to the planned exercises/physical activities that: meet their goals and preferences enable them to maintain progress</p> <p>5.8 Record changes to patient's exercise referral programmes</p>

Range
<p>5.1</p> <ul style="list-style-type: none"> • Reduce stress and anxiety • Improve retention, therefore achievement • Create an enjoyable environment • Increase motivation • Increase confidence • Safety – Increase attention <p>5.2</p> <ul style="list-style-type: none"> • Warm up • Reasons for programme • Benefits of programme • Types of exercise being undertaken • Cool down • Rest period – e.g. Diabetics, CHD Pts <p>5.3</p> <ul style="list-style-type: none"> • General health and fitness • Physiological • Psychological • Lifestyle • Functional ability • Risk reduction

5.4

- Help mentally prepare
- Perceived pain and possible discomfort (intensities)
- Posture and correct movement (correct form)

5.5

- Increase one or more of FITT if applicable to condition

5.6

- Structure realistic expectations
- Client's preferences
- Identify short term benefits
- Promote the positive rewards
- take ownership of their goals
- Self reported scales
- Commitment to appointments
- Engagement process

5.7

- meet their goals and preferences
- enable them to maintain progress
- Coach changes and steer direction of change for safety
- Establish why things need to change

5.8

- Re-visiting PARQ and up-date records, plans and medication
- Sign off – client consent

Learning outcome
<p>The learner will:</p> <p>6. Be able to instruct and adapt planned exercises to exercise referral patients</p>
Assessment criteria
<p>The learner can:</p> <p>6.1 Use motivational styles that:</p> <ul style="list-style-type: none"> • are appropriate to the patients • are consistent with accepted good practice <p>6.2 Explain the purpose and value of a warm-up to patients</p> <p>6.3 Provide warm-ups appropriate to the patients, planned exercise and the environment</p> <p>6.4 Make best use of the environment in which the patients are exercising</p> <p>6.5 Provide instructions, explanations and demonstrations that are technically correct, safe and effective</p> <p>6.6 Adapt verbal and non-verbal communication methods to make sure patients understand what is required</p> <p>6.7 Ensure patients can carry out the exercises safely on their own</p> <p>6.8 Analyse the performance of patients, providing positive reinforcement throughout</p> <p>6.9 Correct exercise technique at appropriate points</p> <p>6.10 Progress or regress exercises according to patients' performance</p> <p>6.11 Monitor and modify the intensity of exercise appropriate to patient and their condition</p>

Range
<p>6.1 Coaching/instructing styles Self motivation</p> <p>6.2 Reduce chance of injury Prepare mind and body for physical activity Explain in relation to patient's medical condition Increase in motor/functional skills</p> <p>6.3 Use appropriate methods Use appropriate intensity Use appropriate duration Use appropriate equipment Use correct timings Include all aspects of a warm up which are safe and effective</p> <p>6.4 Gym /Studio/sports hall Home Outdoors</p>

6.5

IDEA

NAMSIT

6.6

Body language -

- facial expressions,
- gestures,
- eye contact
- posture

6.7

Ensure correct technique has been practiced

Provide programme cards relevant to exercises being undertaken and in what order

6.8

Evaluating

Reflective practice

6.9

Adapting client position at any point of the programme

When fatigue sets in

New exercise techniques

Complex exercise techniques

6.10

- If exercise becomes too intense
- If patient's condition worsens during exercise
- If exercise technique is incorrect
- If targets are not achieved

6.11

Perceived exertion becomes too high - reduce intensity

HR response - increase or reduce intensity

Physiological appearance - observation

Learning outcome
The learner will: 7. Be able to bring exercise referral sessions to an end
Assessment criteria
<p>The learner can:</p> <p>7.1 Allow sufficient time for the closing phase of the session</p> <p>7.2 Explain the purpose and value of cool-down activities to patients</p> <p>7.3 Select cool-down activities according to the type and intensity of physical exercise, patient needs and environment</p> <p>7.4 Provide patients with feedback and positive reinforcement</p> <p>7.5 Explain to patients how their progress links to their goals</p> <p>7.6 Allow patients the opportunity to ask questions and discuss their performance</p> <p>7.7 Inform patients about future opportunities for exercise and physical activity</p> <p>7.8 Leave the environment in a condition suitable for future use</p>

Range
<p>7.1</p> <ul style="list-style-type: none"> • Allow time for cool down • Allow time to gain feedback <p>7.2</p> <ul style="list-style-type: none"> • Benefits in relation to patient's condition • Effects in relation to patient's condition <p>7.3</p> <ul style="list-style-type: none"> • Safe and effective • Correct intensity <p>7.4</p> <ul style="list-style-type: none"> • Targets/aims met • Effectiveness of programme • Summary of session <p>7.5</p> <ul style="list-style-type: none"> • Link to short, medium and long term goals <p>7.8</p> <ul style="list-style-type: none"> • Clear all equipment away safely using correct lifting techniques if applicable • Ensure all equipment is wiped down where necessary • Leave area in an acceptable condition for future sessions • Equipment stored correctly

Learning outcome
The learner will: 8. Be able to review exercise referral sessions
Assessment criteria
<p>The learner can:</p> <p>8.1 Review the outcomes of working with patients including their feedback</p> <p>8.2 Identify:</p> <ul style="list-style-type: none"> • how well the sessions met patients' goals • how effective and motivational the relationship was with patients • how well the instructing styles matched patients' needs <p>8.3 Identify how to improve personal practice</p> <p>8.4 Explain the value of reflective practice</p>

Range
<p>8.1</p> <ul style="list-style-type: none"> • Feedback • Patient evaluation • Self evaluation <p>8.2</p> <ul style="list-style-type: none"> • Feedback/verbal/written • Patient evaluation • Review SMART targets • Self evaluation <p>8.3</p> <ul style="list-style-type: none"> • Communication and listening skills • CPD • Self evaluation <p>8.4</p> <ul style="list-style-type: none"> • Personal development • Identifying strengths and areas to improve • Recognise available opportunities within the industry

UAN:	A/600/9051
Level:	Level 3
Credit value:	6
GLH:	43
Endorsement by a sector or regulatory body:	This unit is endorsed by Skills Active
Aim:	This unit covers the knowledge an instructor needs about anatomy and physiology relating to exercise programming for a range of clients.

Learning outcome
The learner will: 1. Understand the heart and circulatory system and its relation to exercise and health
Assessment criteria
The learner can: 1.1 Explain the function of the heart valves 1.2 Describe coronary circulation 1.3 Explain the effect of disease processes on the structure and function of blood vessels 1.4 Explain the short and long term effects of exercise on blood pressure, including the valsalva effect 1.5 Explain the cardiovascular benefits and risks of endurance/aerobic training 1.6 Define blood pressure classifications and associated health risks

Range
3.1 Valves Bicuspid, tricuspid (atrioventricular valves), aortic and pulmonary (semilunar valves)
3.2 Short term Increase in systolic pressure, diastolic pressure remains approximately the same
Long term Decrease in both systolic and diastolic pressures to a healthy rate
3.5 Cardiovascular benefits Interaction of the energy systems and production of ATP during a range of cardiovascular activities, energy systems used, effects of exercise intensity, effects of duration, effects of clients fitness levels, reduced risk of CHD

Learning outcome
The learner will: 2. Understand the musculoskeletal system and its relation to exercise
Assessment criteria
The learner can: 2.1 Explain the cellular structure of muscle fibres 2.2 Describe the sliding filament theory 2.3 Explain the effects of different types of exercises on muscle fibre type 2.4 Identify and locate the muscle attachment sites for the major muscles of the body 2.5 Name, locate and explain the function of skeletal muscle involved in physical activity 2.6 Identify the anatomical axis and planes with regard to joint actions and different exercises 2.7 Explain the joint actions brought about by specific muscle group contractions 2.8 Describe joints/joint structure with regard to range of motion/movement and injury risk 2.9 Describe joint movement potential and joint actions 2.10 Describe the structure of the pelvic girdle and associated muscles and ligaments

Range
<p>2.1 Muscle fibres Slow twitch (Type I), Fast twitch (Type IIb), Fast twitch (Type IIa)</p> <p>2.3 Effects of different types of exercises Slow twitch: increase in size and number of mitochondria, increase in myoglobin, increase in capillary network, increase in glycogen stores Fast twitch: increase in phosphocreatine stores, increase in glycogen stores, increase in glycolytic enzymes, increase lactic acid threshold</p> <p>2.5 Function Movement of joints/limbs during exercise/activities</p> <p>2.6 Anatomical axis and planes Sagittal plane: flexion, extension, protraction, retraction, plantar flexion, dorsi flexion Frontal plane: abduction, adduction, lateral flexion, elevation, depression, inversion, eversion Transverse plane: rotation, horizontal flexion, horizontal extension</p> <p>2.8 Joints/joint structure joint capsule, ligaments, tendons, muscle attachment</p> <p>2.10 Structure of the pelvic girdle Pelvic structure: ilium, ischium, pubis, pubis symphysis, acetabulum, gender differences, sacroiliac joints, sacrum, coccyx</p> <p>2.10 Muscles (Pelvis) Rectus abdominus, external obliques, internal obliques, transverse abdominus, erector spinae, quadratus lumborum, multifidus, pelvic floor muscles (levator ani, coccygeus)</p>

Learning outcome
The learner will: 3. Understand postural and core stability
Assessment criteria
<p>The learner can:</p> <p>3.1 Describe the structure and function of the stabilising ligaments and muscles of the spine</p> <p>3.2 Describe local muscle changes that can take place due to insufficient stabilisation</p> <p>3.3 Explain the potential effects of abdominal adiposity and poor posture on movement efficiency</p> <p>3.4 Explain the potential problems that can occur as a result of postural deviations</p> <p>3.5 Explain the impact of core stabilisation exercise and the potential for injury/aggravation of problems</p> <p>3.6 Explain the benefits, risks and applications of the following types of stretching:</p> <ul style="list-style-type: none"> • static (passive and active) • dynamic • proprioceptive Neuromuscular Facilitation

Range
<p>3.1 Stabilising ligaments and muscles Ligaments: anterior Longitudal, posterior Longitudal Muscles: splenius, erector spinae, transverse spinalis (multifidus, rotatores), intertransverarii</p> <p>3.2 Insufficient stabilisation Kyphosis: muscular imbalance, upper body adiposity, osteoporosis of the upper thoracic vertebrae Lordosis: weak abdominal muscles, lower body adiposity, pregnancy Scoliosis: genetic abnormality, muscular imbalance Flatback syndrome: tight hamstrings Problems: impingement of peripheral nerve fibres, bulging of intervertebral discs, damage to spinal ligaments, abnormal postural alignment, pelvic tilt, shoulder girdle problems, soft tissue dysfunction, balance</p>

Learning outcome
The learner will: 4. Understand the nervous system and its relation to exercise
Assessment criteria
<p>The learner can:</p> <p>4.1 Describe the specific roles of: the central nervous system (CNS) the Peripheral Nervous System (PNS) including somatic and autonomic systems</p> <p>4.2 Describe nervous control and transmission of a nervous impulse</p> <p>4.3 Describe the structure and function of a neuron</p> <p>4.4 Explain the role of a motor unit</p> <p>4.5 Explain the process of motor unit recruitment and the significance of a motor unit's size and number of muscle fibres</p> <p>4.6 Explain the function of muscle proprioceptors and the stretch reflex</p> <p>4.7 Explain reciprocal inhibition and its relevance to exercise</p> <p>4.8 Explain the neuromuscular adaptations associated with exercise/training</p> <p>4.9 Explain the benefits of improved neuromuscular coordination/efficiency to exercise performance</p>

Range
<p>4.1 CNS Brain and spinal cord</p> <p>PNS Peripheral nerves (afferent/sensory nerves, efferent/motor nerves), somatic branch, autonomic branch (sympathetic, parasympathetic)</p> <p>4.5 Motor unit recruitment Motor unit (motor nerve/neuron and muscle fibres), single twitch, wave summation, tetanus</p> <p>4.6 Proprioceptors Muscle spindles, golgi-tendon organs (GTOs)</p> <p>4.8 Neuromuscular adaptations Improved motor unit synchronisation, improved ability to recruit more motor units, autogenic inhibition</p> <p>4.9 Benefits Improved coordination, recruitment of muscle fibres, improved reaction time, improved balance, proprioception</p>

Learning outcome
The learner will: 5. Understand the endocrine system and its relation to exercise and health
Assessment criteria
The learner can: 5.1 Describe the functions of the endocrine system 5.2 Identify the major glands in the endocrine system 5.3 Explain the function of hormones including: <ul style="list-style-type: none"> • growth hormone • thyroid hormones • corticosteroids • catecholamines • insulin • glucagon

Range
5.2 Major glands Pituitary, adrenal, thyroid, parathyroid, sex organs (testes, ovaries), pancreas

Learning outcome
The learner will: 6. Understand energy systems and their relation to exercise
Assessment criteria
The learner can: 6.1 Identify the contribution of energy according to: <ul style="list-style-type: none"> • duration of exercise/activity being performed • type of exercise/activity being performed • intensity of exercise/activity being performed 6.2 Identify the by-products of the three energy systems and their significance in muscle fatigue 6.3 Describe the effect of endurance training/advanced training methods on the use of fuel for exercise

Range
6.2 By-products Heat, lactic acid, carbon dioxide, water (sweat), free radicals 6.3 Effect Increased aerobic base, increased anaerobic threshold, increase tolerance to build up to lactic acid, Onset of Blood Lactate Accumulation (OBLA)

Unit 306

Applying the principles of nutrition to a physical activity programme

UAN:	L/600/9054
Level:	Level 3
Credit value:	6
GLH:	40
Endorsement by a sector or regulatory body:	This unit is endorsed by Skills Active
Aim:	This unit covers the learner's ability to apply the principles of nutrition to support client goals as part of an exercise and physical activity programme.

Learning outcome
The learner will: 1. Understand the principles of nutrition
Assessment criteria
The learner can: 1.1 Describe the structure and function of the digestive system 1.2 Explain the meaning of key nutritional terms including: <ul style="list-style-type: none">• diet• healthy eating• nutrition• balanced diet 1.3 Describe the function and metabolism of: <ul style="list-style-type: none">• macro nutrients• micro nutrients 1.4 Explain the main food groups and the nutrients they contribute to the diet 1.5 Identify the calorific value of nutrients 1.6 Explain the common terminology used in nutrition including: <ul style="list-style-type: none">• UK dietary reference values (DRV)• recommended daily allowance (RDA)• recommended daily intake (RDI)• glycemic Index 1.7 Interpret food labelling information

- | |
|---|
| <p>1.8 Explain the significance of healthy food preparation</p> <p>1.9 Explain the relationship between nutrition, physical activity, body composition and health including:</p> <ul style="list-style-type: none"> • links to disease / disease risk factors • cholesterol • types of fat in the diet |
|---|

<p>Range</p>

<p>1.1</p>

<p>Structure</p>

<p>Mouth, epiglottis, oesophagus, stomach, duodenum, small intestine, large intestine, anus</p>

<p>1.3</p>

<p>Macro nutrients</p>

<p>Carbohydrates, proteins, fats</p>

<p>Bread, rice, pasta, and starch foods / fruits and vegetables / milk and dairy / meat / fish and alternatives / foods high in fat or sugar</p>
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<p>Micro nutrients</p>

<p>Vitamins (A, B1, B2, B12, Niacin, Folic Acid, C, D, E, K), minerals (calcium, iron, magnesium, phosphorus, potassium, sodium, sulphur)</p>

<p>1.4</p>

<p>Main food groups</p>

<p>Carbohydrates, proteins, fats</p>

<p>Learning outcome</p>

<p>The learner will:</p>

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| <p>2. Understand key guidelines in relation to nutrition</p> |
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<p>Assessment criteria</p>

<p>The learner can:</p>

- | |
|--|
| <p>2.1 Identify the range of professionals and professional bodies involved in the area of nutrition</p> <p>2.2 Explain key healthy eating advice that underpins a healthy diet</p> <p>2.3 Describe the nutritional principles and key features of the National food model/guide</p> <p>2.4 Define portion sizes in the context of the National food model/guide</p> <p>2.5 Explain how to access reliable sources of nutritional information</p> <p>2.6 Distinguish between evidence-based knowledge versus the unsubstantiated marketing claims of suppliers</p> |
|--|

Range
<p>2.1 Professionals and professional bodies/ Sources of nutritional information World Health Organisation (WHO), British Nutrition Foundation, British Diabetic Association, Health Education Authority (HEA), British Heart Foundation, British Diabetic Foundation, Food Standards Agency (FSA)</p> <p>2.3 National food model/guide Recommended daily allowance, eatwell plate</p> <p>2.4 Portion sizes Starch carbohydrates: 6-11 servings, vegetables: 3-5 servings, fruit: 2-4 servings, dairy products: 2-3 servings, meat, fish, poultry: 2-3 servings, fats, oils, sweets: use sparingly</p>

Learning outcome
<p>The learner will:</p> <p>3. Understand nationally recommended practice in relation to providing nutritional advice</p>
Assessment criteria
<p>The learner can:</p> <p>3.1 Explain professional role boundaries with regard to offering nutritional advice to clients</p> <p>3.2 Explain the importance of communicating health risks associated with weight loss fads and popular diets to clients</p> <p>3.3 Evaluate the potential health and performance implications of severe energy restriction, weight loss and weight gain</p> <p>3.4 Identify clients at risk of nutritional deficiencies</p> <p>3.5 Explain how cultural and religious dietary practices can influence nutritional advice</p> <p>3.6 Describe safety, effectiveness and contraindications relating to protein and vitamin supplementation</p> <p>3.7 Explain why detailed or complex dietary analysis that incorporates major dietary change should always be referred to a Registered Dietician</p>

Range
<p>3.2 Health risks Yo-yo dieting, low body fat resulting in loss of periods (amenorrhoea), osteoporosis, insufficient vitamins and minerals, unhealthy cholesterol levels</p> <p>3.3 Severe energy restriction Irregular metabolism, break down of body tissues (muscle), low in energy stores, impaired performance, physical/sporting performance</p>

Learning outcome
The learner will: 4. Understand the relationship between nutrition and physical activity
Assessment criteria
The learner can: 4.1 Define the role of carbohydrate, fat and protein as fuels for aerobic and anaerobic energy production 4.2 Explain the components of energy expenditure and the energy balance equation 4.3 Explain how to calculate an estimate of Basal Metabolic Rate (BMR) 4.4 Explain how to estimate energy requirements based on physical activity levels and other relevant factors 4.5 Identify energy expenditure for different physical activities 4.6 Evaluate the nutritional requirements and hydration needs of clients engaged in physical activity

Range
4.1 Aerobic Aerobic glycolysis/aerobic system (carbohydrates and fats) Anaerobic Anaerobic glycolysis/lactic acid system (carbohydrates), CP/PC system (Creatine phosphate) 4.2 Components of energy expenditure Aerobic system: Low/moderate intensity, prolonged duration exercise Lactic Acid System: High intensity, short duration exercise Creatine Phosphate system: Very high intensity, very short duration exercise

Learning outcome
The learner will: 5. Understand how to collect information relating to nutrition
Assessment criteria
The learner can: 5.1 Explain why it is important to obtain clients' informed consent before collecting nutritional information 5.2 Describe the information that needs to be collected to offer nutritional advice to clients 5.3 Explain the legal and ethical implications of collecting nutritional information 5.4 Describe different formats for recording nutritional information 5.5 Explain why confidentiality is important when collecting nutritional information 5.6 Describe issues that may be sensitive when collecting nutritional information 5.7 Explain different methods that can be used to measure body composition and health risk in relation to weight

Range
5.1 Information Food consumed, fluid intake, portions of food, times food is consumed
5.4 Formats Pie charts, food diary, graphs, reports
5.7 Methods Body fat percentage, skin callipers, hydrostatic weighing, bio-electrical impedance, hip waist ratio

Learning outcome
The learner will: 6. Understand how to use nutritional information
Assessment criteria
The learner can: 6.1 Describe basic dietary assessment methods 6.2 Explain how to analyse and interpret collected information so that clients' needs and nutritional goals can be identified with reference to the National food model/guide recommendations 6.3 Describe how to interpret information gained from methods used to assess body composition and health risk in relation to weight 6.4 Explain how to sensitively divulge collected information and 'results' to clients 6.5 Explain how to recognise the signs and symptoms of disordered eating and healthy eating patterns 6.6 Describe the key features of the industry guidance note on 'Managing users with suspected eating disorders' 6.7 Explain the circumstances in which a client should be recommended to visit their GP about the possibility of referral to a Registered Dietician

Range
6.1 Dietary assessment methods Food diary, reports, consultation, observation
6.5 Signs and symptoms of disordered eating Frequency of meals, quantity of meals, quality of meals, consistency, attitude to eating, behaviour
6.6 Managing users with suspected eating disorders There is a document on the website outlining this information

Learning outcome
The learner will: 7. Understand the principles of nutritional goal setting with clients
Assessment criteria
<p>The learner can:</p> <p>7.1 Explain how to apply the principles of goal setting when offering nutritional advice</p> <p>7.2 Explain how to translate nutritional goals into basic healthy eating advice that reflects current National guidelines</p> <p>7.3 Explain when people other than the client should be involved in nutritional goal setting</p> <p>7.4 Define which other people could be involved in nutritional goal setting</p> <p>7.5 Identify the barriers which may prevent clients achieving their nutritional goals</p> <p>7.6 Explain how to apply basic motivational strategies to encourage healthy eating and prevent non-compliance or relapse</p> <p>7.7 Explain the need for reappraisal of clients' body composition and other relevant health parameters at agreed stages of the programme</p>

Range
<p>7.1 Principles of goal setting SMART- Specific, Measurable, Achievable, Realistic, Time bound</p> <p>7.3 People General practitioner, registered dietician, coach, nutritional specialist</p> <p>7.5 Barriers Motivation, finance, time, commitments (family, work), religion/culture, lifestyle, medication</p> <p>7.6 Motivational strategies Goal setting, rewards, focusing, support systems, contingency plan or alternative foods, lifestyle changes, self recognition of clients own barriers</p>

Learning outcome
The learner will: 8. Be able to collect and analyse nutritional information
Assessment criteria
The learner can: 8.1 Collect information needed to provide clients with appropriate healthy eating advice 8.2 Record information about clients and their nutritional goals in an approved format 8.3 Analyse collected information including nutritional needs and preferences in relation to the clients current status and nutritional goals

Learning outcome
The learner will: 9. Be able to apply the principles of nutrition to a physical activity programme
Assessment criteria
The learner can: 9.1 Access and make use of credible sources of educational information and advice in establishing nutritional goals with clients 9.2 Design and agree nutritional goals that are compatible with the analysis, accepted good practice and national guidelines 9.3 Ensure that the nutritional goals support and integrate with other programme components 9.4 Agree review points with the clients 9.5 Review the clients understanding of how to follow the nutritional advice as part of their physical activity programme 9.6 Monitor, evaluate and review the clients' progress towards their nutritional goals

Range
9.1 Sources of information World Health Organisation (WHO), British Nutrition Foundation, British Diabetic Association, Health Education Authority (HEA), British Heart Foundation, British Diabetic Foundation, Food Standards Agency (FSA)



Appendix 1 Relationships to other qualifications

Links to other qualifications

Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see **www.cityandguilds.com/functionalskills**
- Essential Skills (Northern Ireland) – see **www.cityandguilds.com/essentialskillsni**
- Essential Skills Wales – see **www.cityandguilds.com/esw**



Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line
- **Qualifications and Credit Framework (QCF):** general guidance about the QCF and how qualifications will change, as well as information on the IT systems needed and FAQs
- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for GOLA/e-volve assessments.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve ‘approved centre’ status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

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www.cityandguilds.com

Useful contacts

UK learners

General qualification information

T: +44 (0)844 543 0033

E: learnersupport@cityandguilds.com

International learners

General qualification information

T: +44 (0)844 543 0033

F: +44 (0)20 7294 2413

E: **intcg@cityandguilds.com**

Centres

Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: **centresupport@cityandguilds.com**

Single subject qualifications

Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

F: +44 (0)20 7294 2404 (BB forms)

E: **singlesubjects@cityandguilds.com**

International awards

Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: **intops@cityandguilds.com**

Walled Garden

Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems

T: +44 (0)844 543 0000

F: +44 (0)20 7294 2413

E: **walledgarden@cityandguilds.com**

Employer

Employer solutions, Mapping, Accreditation, Development Skills, Consultancy

T: +44 (0)121 503 8993

E: **business@cityandguilds.com**

Publications

Logbooks, Centre documents, Forms, Free literature

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F: +44 (0)20 7294 2413

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City & Guilds

1 Giltspur Street
London EC1A 9DD
T +44 (0)844 543 0000
F +44 (0)20 7294 2413
www.cityandguilds.com

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