

#### **Personal Trainer Qualification Standards**

#### **Content covered in the Personal Trainer qualification**

These standards describe the competence required to instructor personal training sessions. The Personal Trainer qualification requires 250 hours Guided Learning Hours (GLH) which must include 150 Face to Face Tuition hours (FTH), 75 hours of which must be practical.

Wherever the term 'standards' is used in this document, this means skills (or occupational) standards, not any other types of standards that may be used in the health and fitness industry for club certification or other purposes.

Click on the link below to take you to each unit.

- Unit 1 (A2) Carry out client fitness assessments
- Unit 2 (B8) Plan and deliver personal training sessions
- <u>Unit 3 (C1)</u> <u>Design personal training programmes</u>
- Unit 4 (C2) Manage, review, adapt and evaluate personal training programmes
- Unit 5 (C3) Apply the principles of nutrition and weight management to programme design
- Unit 6 (C4) Apply the principles of exercise science to programme design
- <u>Unit 7 (D2)</u> Support long term behaviour change by monitoring client exercise adherence and applying motivational techniques

The unit code given in brackets refers to the ICREPs Global Standards.



#### Unit 1 (A2) Carry out client fitness assessments

## This section covers the following knowledge, which must be delivered in full to the learners:

- Prepare to assess client fitness
- Conduct fitness assessments
- Analyse and record current levels of client fitness
- Providing feedback to clients on the results of fitness assessments
   The guided Learning hours (GLH) required to deliver and assess this unit is 30 hours.

#### **Knowledge to be covered**

#### Prepare to assess client fitness

- 1. Know the importance of collecting accurate information about the client(s) before starting any assessments.
- 2. Consider medical and health conditions indicating the need for a medical clearance before beginning any fitness assessments
- 3. Know when to refer clients to another professional, or seek medical assistance including more experiences/ qualified fitness professionals before taking part in fitness assessments
- 4. Explain to clients why fitness assessments are relevant to an individualised exercise programme
- 5. Decide with client's what information to collect through fitness assessments
- 6. Choose fitness assessments appropriate to clients' current fitness capacity and readiness to participate
- 7. Explain the aims of planned fitness assessments to clients and what these assessments will involve
- 8. Describe how you determined which methods of collecting information are appropriate according to the individual
- 9. Consider alternatives to physical fitness assessments
- 10. Describe the principles of informed consent
- 11. Explain clients' rights and ensure they provide consent to take part in fitness assessments
- 12. Organise the equipment so that fitness assessments can be carried out as planned

#### **Conduct fitness assessments**

- 13. Describe Fitness industry standards and practices for the conduct of safe fitness assessments
- 14. Demonstrate correct use of fitness assessment equipment
- 15. Implement planned physical fitness assessments, using the correct tools, methods and protocols to enable client's fitness capabilities to be assessed accurately, which may include:
  - anthropometrics (e.g. height and weight, BMI, waist circumference or waist to hips ratio)
  - blood pressure (manual and digital where available)
  - body composition (e.g. callipers, bio-electrical impedance etc.)
  - cardiovascular fitness (using validated/recognised protocols such as Astrand bike test, Rockport walking test etc.) and submaximal predictive test of cardiovascular capacity using a specified protocol



- range of motion (e.g. using validated/recognised protocols such as sit and reach test, visual assessment during stretch positions etc.)
- muscular fitness (e.g. using validated/recognised protocols such as abdominal curl/sit-up test, press-up test etc.)
- 16. Use correct formats for recording information, ensuring information is accessible for consideration during retesting in the future
- 17. Analyse the strengths and weaknesses of the various methods of fitness assessment for different types of clients
- 18. Use alternative methods of data collection where the use of the tests listed above is not appropriate for client needs and readiness
- 19. Apply effective contingency management techniques to deal with a range of problems and issues that may arise during fitness assessments
- 20. Show empathy for clients and put clients at ease during the fitness assessment process. Show sensitivity to clients' goals and current stage of readiness
- 21. Take account of all relevant safety considerations, including client monitoring during fitness assessments
- 22. Record fitness assessment results in a way that will help to analyse them

#### Analyse and record current levels of client fitness

- 23. Process assessment results according to protocol and calculation requirements
- 24. Analyse the results of fitness assessments according to protocol and calculation requirements
- 25. Record recommendations for the client's exercise programme
- 26. Provide feedback to clients about their current levels of fitness
- 27. Communicate assessment data to clients using basic language which is free of jargon
- 28. Explain the results of the fitness assessments and the implications for exercise programme design
- 29. Explain the impact of reliability and validity on the value of exercise testing to clients
- 30. Treat client information with sensitivity and discretion
- 31. Make informed recommendations to clients on appropriate exercise programmes
- 32. Refer any clients whose needs and potential they cannot meet to another professional, including more experienced/ qualified fitness professionals
- 33. Maintain client confidentiality and ensure ethical and compliant collection of information.
- 34. Seek feedback from clients to ensure the assessment results were understood

#### Providing feedback to clients on the results of fitness assessments

- 35. Use suitable methods of communicating results to clients
- 36. Identify how to use the results of fitness assessments in programme design
- 37. Consider the types of errors that can occur during exercise testing
- 38. Identify methods to improve the validity and reliability of testing for exercise clients



- 39. Consider the impact of poor validity and reliability on exercise testing results in relation to exercise client motivation and programme design
- 40. Identify professional limitations relating to safe operation and scope of practice
- 41. Follow legal and organisational requirements for data protection and confidentiality

#### Unit 2 (B8) Plan and deliver personal training sessions

## This section covers the following knowledge, which must be delivered in full to the learners:

- Plan personal training sessions
- Prepare the environment and equipment for personal training sessions
- Prepare clients for personal training sessions
- Demonstrate exercises and use of equipment
- Instruct and adapt planned exercises
- Bring exercise sessions to an end
- Reflect on providing personal training sessions
- Personal training equipment and training specifications

The guided Learning hours (GLH) required to deliver and assess this unit is 30 hours.

#### Knowledge to be covered

#### Plan personal training sessions

- 1. When planning consider typical preferences, needs and expectations of clients to include:
  - cultural considerations
  - fitness goals
  - perceived benefits
  - cost
  - time availability
- 2. When planning consider the needs of a range of clients to include:
  - experienced
  - inexperienced
  - active
  - inactive
- 3. Plan a range of exercises to help clients achieve their objectives and goals, covering:
  - cardiovascular fitness
  - muscular fitness
  - flexibility
  - motor skills
  - core stability
- 4. Plan using a range of fitness equipment to include:
  - exercise balls
  - bars
  - steps
  - bands
  - abdominal assisters
  - plyometric training systems
  - pin loaded
  - cardiovascular
  - · free weight



- hydraulic
- electronic and air-braked equipment
- 5. Use music appropriately if relevant to the session type and session objectives

#### Prepare the environment and equipment for personal training sessions

- 6. Obtain permission for use of public spaces if required
- 7. Evaluate the exercise environment for suitability for exercise and to ensure client safety
- 8. Identify, obtain and prepare the resources and equipment needed for planned exercises, improvising safely where necessary

#### Prepare clients for personal training sessions

- 9. Help clients feel at ease in the exercise environment
- 10. Explain the planned objectives and exercises to clients and how they meet client goals
- 11. Explain the physical and technical demands of the planned exercises to clients
- 12. Assess clients' state of readiness and motivation to take part in the planned exercises
- 13. Negotiate and agree with clients any changes to the planned exercises that meet their goals and preferences and enable them to maintain progress
- 14. Explain the purpose and value of a warm-up and cool down to clients
- 15. Provide warm-up activities appropriate to the clients, planned exercise and the environment

#### Demonstrate exercises and use of equipment

- 16. Determine clients' prior knowledge and skill in the exercise
- 17. Demonstrate the correct and safe performance of exercises to the client using appropriate anatomical terminology as required
- 18. Demonstrate safe and appropriate use of fitness equipment including cardio-vascular equipment, free weights and innovative exercise equipment

#### Instruct and adapt planned exercises

- 19. Provide clear instructions, explanations and demonstrations that are technically correct, safe and effective
- 20. Use a range of methods to instruct to meet the client's preferred learning style
- 21. Communicate effectively with the client, adapting your communication style to meet the client's needs, ensure your communication style is able to:
  - establish rapport with client
  - give instructions that are clear to the client
  - · adjust volume and pitch for the environment
  - motivational, especially when clients are finding exercises difficult
- 22. Ensure suitable instructing position to be able to observe the client fully from a range of angles
- 23. Supervise client exercise sessions according to the exercise plan, ensuring the client is able to perform exercises in a safe and correct manner
- 24. Use correcting techniques that are suitable and at appropriate points in the session
- 25. Apply the limiting factors of the body's energy systems to the setting of exercise intensities as required
- 26. Analyse client's performance during the session, provide positive reinforcement



- 27. Based on the analyse of the client's performance give suitable adaptations, progress or regress exercises according to clients' needs
- 28. Explain why it is important to monitor individual progress especially if more than one client is involved in the session
- 29. Ensure clients can carry out the exercises safely on their own
- 30. Use motivational techniques for individual training to increase performance and adherence to exercise
- 31. Recommend and implement steps that improve exercise adherence for clients
- 32. Relate knowledge of the cardiovascular system to movement and instruction to make suitable adjustments for the client's needs.
- 33. Relate the location and function of the major bones and major joints to movement when instructing the client, use knowledge to make suitable adjustments and modifications
- 34. Relate major muscles and their prime moving movements at major joints in the body to movement when instructing clients, use knowledge to make suitable adjustments and modifications
- 35. Keep appropriate records of personal training sessions in relation to the overall programme
- 36. Explain why clients need to see their progress against objectives in terms of their overall goals and programme

#### Bring exercise sessions to an end

- 37. Select and deliver cool-down activities according to the type and intensity of physical exercise and client needs and condition
- 38. Allow sufficient time for the closing phase of the session
- 39. Provide clients with feedback and positive reinforcement
- 40. Encourage clients to think about the session and provide feedback
- 41. Explain to clients how their progress links to their goals and the overall programme
- 42. Leave the environment in a condition suitable for future use

#### Reflect on providing personal training sessions

- 43. Review the outcomes of working with clients including their feedback
- 44. Identify how to improve personal practice:
  - how well the sessions met clients' goals
  - how effective and motivational the relationship with the client was
  - how well the instructing styles matched the clients' needs

Personal training – equipment and training specifications	
Cardiovascular approaches to training:	interval
	Fartlek
	• continuous
Equipment:	cardiovascular machines
	resistance machines
	<ul> <li>free weights – including barbells and</li> </ul>
	dumbbells and cables where available
Correct lifting and passing techniques, including dead lifting the barbell safely from the floor and	

Correct lifting and passing techniques, including dead lifting the barbell safely from the floor and spotting



Resistance approaches to training:	pyramid systems
	super-setting
	giant sets
	• tri-sets
	forced repetitions
	pre-/post-exhaust
	negative / eccentric training
	muscular strength, endurance / muscular
	fitness

#### Unit 3 (C1) Design personal training programmes

## This section covers the following knowledge, which must be delivered in full to the learners:

- Collect information about clients
- Analyse information and agree goals with clients
- Plan personal training programmes
- Plan components of personal training programmes
- Plan components of personal training programmes
- Present and agree personal training programmes with clients
   The guided Learning hours (GLH) required to deliver and assess this unit is 30 hours.

#### **Knowledge to be covered**

#### **Collect information about clients**

- 1. Know how to establish a rapport with clients using suitable communication skills
- 2. Agree with clients their needs and readiness to participate
- 3. Know how to show empathy and be sensitive to client's goals and current stage of readiness
- 4. Recognise any cultural barriers to exercise and personal training sessions
- 5. Explain the personal trainer role and responsibilities to clients
- 6. Decide the relevant information to collect to plan a programme for the client, these could include:
  - personal goals
  - lifestyle
  - medical history
  - physical activity history
  - physical activity likes and dislikes
  - attitude
  - motivation to participate and barriers to participation
  - current fitness level
  - · stage of readiness
  - posture and alignment
  - functional ability
- 7. Identify why it is important to screen clients and collect accurate information about clients
- 8. Record the information using appropriate formats in a way that will aid analysis, these could include:
  - interview



- questionnaire
- observation
- physical/fitness assessments
- 9. Analyse the strengths and weaknesses of the various methods of collecting information for different types of clients, such as:
  - beginners
  - advanced
  - inexperienced
- 10. Follow legal and ethical requirements for the security and confidentiality of client information such as:
  - confidentiality
  - informed consent
  - data protection
- 11. Identify the types of medical conditions that will prevent personal trainers from working with a client unless they have specialist training and qualifications,
- 12. Know how and when clients should be referred to another professional

#### Analyse information and agree goals with clients

- 13. Organise the information in a way which will help to interpret and analyse it.
- 14. Analyse the collected information in order to identify clients' needs and goals
- 15. Know how to identify personal training goals with the client,
- 16. Describe why it is important to base goal set with client
- 17. Describe why it is important to identify and agree with the client short, medium and long term goals with clients. Ensure these consider the following:
  - clients' general health and fitness
  - physiological
  - psychological
  - lifestyle
  - social
  - functional ability
  - barriers to exercise
  - clients' fear and reservations about physical activity
- 18. Describe the importance of long-term behaviour change and how to ensure clients understand and commit themselves to long-term change
- 19. Describe the importance of clients understanding the advantages of taking part in a personal training programme and identifying any obstacles they may face.
- 20. Create strategies which can prevent drop out or relapse
- 21. Develop objectives for the programme and each phase of the programme, in consultation with clients
- 22. Record the agreed goals in a format that is clear to clients, the personal trainer and others who may be involved in the programme
- 23. Identify and agree strategies to prevent drop out or relapse
- 24. Agree how to maintain contact with clients between sessions

#### Plan personal training programmes

25. Describe how to access and use credible sources of guidelines on programme design and



	safe exercise
26.	Describe how to identify and research accepted good practice in designing personal training
	programmes.
27.	Plan specific outcome measures, stages of achievement and exercises/physical activities
	that are appropriate to clients' goals and level of fitness
28.	Make sure exercises/physical activities are consistent with accepted good practice
29.	Explain and agree the demands of the programme with clients

- 30. Plan and agree a progressive timetable of sessions with clients
- 31. Agree appropriate evaluation methods and review dates
- 32. Identify the resources needed for the programme, including the use of environments not designed for exercise
- 33. Apply the principles of training to help clients to achieve short, medium and long-term goals
- 34. Ensure the components of fitness are built into the programme, to include some or all of the following:
  - cardiovascular fitness
  - muscular fitness
  - flexibility
  - motor skills
  - core stability
- 35. Ensure effective integration of all programme exercises/ physical activities and sessions
- 36. Provide alternatives to the programmed exercises/physical activities if clients cannot take part as planned
- 37. Record plans in a format that will help to implement the programme
- 38. Use clear and structured forms when writing exercise plans and exercise programmes
- 39. Identify the need for support personnel within the programme

#### Plan components of personal training programmes

- 40. Plan a resistance programme that matches a client's documented:
  - exercise goals and preferences,
  - current strength status and movement capabilities,
  - injury profile,
  - exercise risk factors
  - possible barriers
- 41. Plan a cardiovascular programme that matches a client's documented:
  - · exercise goals and preferences,
  - · current cardiovascular fitness,
  - injury profile,
  - exercise risk factors
  - possible barriers
- 42. Describe the physiological adaptations that take place as a result of taking part in exercise programme
- 43. Outline the various types of conditioning appropriate to client goals and fitness levels
- 44. Identify how to work in environments that are not specifically designed for exercise/physical activity such as:



- parks
- outdoor spaces
- indoor play and trampoline centres
- community halls
- 45. Describe the range of resources you need to prepare for the personal training session, this could include the following:
  - environment for the session
  - portable equipment
  - fixed equipment

#### Present and agree personal training programmes with clients

- 46. Record the programme in a suitable format for the client
- 47. Present an exercise programme to a client and gain endorsement and commitment to the programme and planned client tasks
- 48. Ensure the client's overall objective/goal is allocated to a date that is achievable and challenging, and is agreed to by the client
- 49. Plan for providing motivation and encouragement to clients during the programme
- 50. Describe the physiological changes and anatomical changes that occur with regular participation in the specific programme to clients
- 51. Identify the smaller goals that must be achieved for successful attainment of the overall goal of the client and that these are allocated to timeframes against a calendar, prioritised and agreed with the client
- 52. Demonstrate an awareness of clients' needs, objectives and exercise likes and dislikes when writing exercise plans
- 53. Design an exercise plan format and structure that is appropriate to the client and the specific target adaptation
- 54. Use the programming principles of planning for specific fitness adaptations when writing fitness exercise plans
- 55. Demonstrate how to use a range of cardiovascular equipment to include:
  - bikes
  - treadmills
  - elliptical trainers
  - stepper
  - rowing machine
- 56. Demonstrate how to use a range of free weight equipment to include:
  - bars
  - dumbbells
  - collars
  - barbells
  - benches
- 57. Demonstrate how to use a range of resistance machines
- 58. Demonstrate how to use a range of portable exercise equipment to include:
  - exercise balls
  - bars
  - steps
  - bands
- 59. Identify and agree barriers relating to the activities required to achieve the exercise plan and record these with possible intervention strategies



- 60. Identify when it may be necessary to share the programme with other professionals
- 61. Describe how to develop the exercise programme, this may include:
  - details relating to the anticipated rate of client adaptation
  - periodisation of multiple target adaptations
  - the number of specific session programmes
  - the nature and purpose of specific session programmes
  - · equipment requirements
  - facility requirements
  - review dates

# Unit 4 (C2) Manage, review, adapt and evaluate personal training programmes

## This section covers the following knowledge, which must be delivered in full to the learners:

- Manage personal training programmes for clients
- Monitor and review on-going progress with clients
- Adapt personal training programmes with clients
- Work with clients to evaluate personal training programmes
- Work with clients to evaluate personal training programmes
- Identify lessons for future practice

The guided Learning hours (GLH) required to deliver and assess this unit is 20 hours.

#### **Knowledge to be covered**

#### Manage personal training programmes for clients

- 1. Monitor effective integration of all programme exercises/ physical activities and sessions
- 2. Undertake client support tasks and document them in a diary or calendar, including calls, next assessment date, any planned contact time
- 3. Provide alternatives to the programmed exercises/physical activities if clients cannot take part as planned

#### Monitor and review on-going progress with clients

- 4. Monitor clients' progress using appropriate methods
- 5. Explain the purpose of monitoring and reviewing the programme with the clients
- 6. Review short, medium and long term goals with clients at agreed points in the programme, taking into account any changes in circumstances
- 7. Encourage clients to give their own views on progress
- 8. Assess clients for relevant fitness level changes
- 9. Use suitable methods of evaluation that will help to review client progress against goals and initial baseline data
- 10. Give feedback to clients during their review that is likely to strengthen their motivation and adherence
- 11. Describe how to recognise the signs and symptoms of overtraining and utilise strategies for its prevention
- 12. Agree review outcomes with clients
- 13. Keep an accurate record of reviews and their outcome



14.	Develop strategies with clients in the areas of support, planning, and effort, to enhance performance
Ada	ot personal training programmes with clients
15.	Identify different training systems and their use in providing variety and ensuring the programme remain effective
16.	Identify goals and exercises/physical activities that need to be redefined or adapted
17.	Agree adaptations, progressions or regressions to meet clients' needs as and when necessary to optimise their achievement
18.	Identify and agree any changes to resources and environments
19.	Introduce adaptations in a way that is appropriate to clients and their needs
20.	Record changes to programme plans to take account of adaptations
21.	Analyse and incorporate clients' exercise likes and dislikes into a modified exercise plan
22.	Review clients' goals and incorporate changes to goals into the exercise plan
23.	Confirm or update goals in line with clients' expectations, experiences and results
24.	Write revised programme and provide instruction to clients
25.	Describe how to communicate adaptations to the clients and other professionals
26.	Describe why it is important to keep accurate records of changes and the reasons for change
Wor	k with clients to evaluate personal training programmes
27.	Describe why it is important to evaluate personal training programmes
28.	Describe the principles of evaluation
29.	Describe what information is needed to evaluate personal training programmes
30.	Describe why it is important to evaluate all stages and components of personal training programmes
31.	Collate all available information regarding the planned programme and client objectives
32.	Collate information regarding client progress, adaptations to the programme and the reasons for adaptation
33.	Collate information regarding client adherence
34.	Describe and demonstrate methods to collect structured feedback from clients
35.	Describe and demonstrate how to analyse available information and client feedback
36.	Draw conclusions about the effectiveness personal training programmes
37.	Discuss conclusions with clients and take account of their views
Iden	tify lessons for future practice
38.	Identify the relative success of each programme component
39.	Prioritise those programme components that are vital to improving practice
40.	Identify how programme components could be improved
41.	Share conclusions with relevant people and take account of their feedback



- 42. Describe how to undertake further research and development to improve programme components
- 43. Describe why continuous improvement is important for personal trainers
- 44. Describe why it is important to share conclusions about improving own practice with other people
- 45. Note lessons for future practice and improvements
- 46. Describe which programme components are vital to improving practice, this could be some or all of the following:
  - Information gathering
  - Planning
  - Selection and structure of activities
  - Programme management
  - Programme monitoring
  - Programme adaptation and progression
  - Client relationship
  - Client motivation and adherence
  - Client satisfaction

# Unit 5 (C3) Apply the principles of nutrition and weight management to programme design

This section covers the following knowledge, which must be delivered in full to the learners:

- Collect and analyse nutrition and weight management information
- Plan how to apply the principles of nutrition and weight management to an exercise programme
- Apply the principles of nutrition and weight management to an exercise programme
- Modify and review nutrition and weight management strategies

The guided Learning hours (GLH) required to deliver and assess this unit is 30 hours.

#### **Knowledge to be covered**

#### Collect and analyse nutrition and weight management information

- 1. Describe the structure and function of the digestive system and the effect of healthy eating on other major body systems
- 2. Describe the main food groups and the nutrients they contribute to the diet
- 3. Describe the meaning of key nutritional terms including:
  - diet
  - healthy eating
  - nutrition
  - balanced diet
  - body composition
  - the calorific value of nutrients
- 4. Describe how cultural and religious dietary practices can influence nutritional advice
- 5. Analyse food labelling information
- 6. Describe the safety, effectiveness and contraindications relating to protein and vitamin supplementation



- 7. Describe the relationship between nutrition, physical activity, body composition and health including:
  - links to disease/disease risk factors
  - cholesterol
  - types of fat in the diet
- 8. Collect information needed to provide clients with appropriate healthy eating and nutritional advice, this could include:
  - personal goals
  - lifestyle
  - medical history
  - physical activity history
  - diet history
  - food preferences
  - supplement use
  - nutritional knowledge
  - attitudes and motivation
  - · stage of readiness
  - medications
- 9. Describe how to access reliable sources of nutritional information
- 10. Demonstrate appropriate methods and protocols for collecting general information about eating habits from clients
- 11. Provide healthy eating advice to include:
  - general healthy eating principles,
  - dietary guidelines and recommendations
  - relevant nutritional guidelines
- 12. Describe the relationship between healthy eating options and current dietary guidelines for a balanced diet to enable the provision of accurate information to clients
- 13. Describe the potential heath and performance implications of severe energy restriction, weight loss and weight gain
- 14. Describe the importance of communicating health risks associated with weight loss fads and popular diets to clients
- 15. Describe how to recognise the signs and symptoms of disordered eating and healthy eating patterns
- 16. Measure the body composition of clients where appropriate which could include the following techniques:
  - weight
  - height
  - hip circumference
  - waist circumference
  - skinfolds
  - body mass indices
- 17. Analyse body composition measurement methods and the relationship between body composition, fat distribution and health to enable the development of realistic and achievable exercise plans and healthy eating advice aligned to client needs and targets
- 18. Describe the management of body composition management in terms of:
  - metabolism
  - energy expenditure
  - energy intake



- balance between energy intake and energy expenditure
- changes to body composition
- muscle gain
- 19. Describe how to deal with clients at risk of nutritional deficiencies
- 20. Describe the guidelines for developing exercise plans to change body composition
- 21. Describe the factors that influence fat-loss response to exercise to enable effective goal setting
- 22. Describe the function and metabolism of:
  - macro nutrients
  - micro nutrients
- 23. Describe the components of energy expenditure and the energy balance equation
- 24. Identify energy expenditure for different physical activities and describe how to estimate energy requirements based on physical activity levels and other relevant factors
- 25. Determine clients' daily energy requirements
- 26. Describe the role of carbohydrate, fat and protein as fuels for aerobic and anaerobic energy production
- 27. Identify basic dietary assessment methods
- 28. Analyse collected information including nutritional needs and preferences in relation to the clients' current status and nutritional goals which could include:
  - healthy eating
  - weight management
  - improved fitness
  - improved self-image
  - Improved health
  - fat loss
  - muscle gain
- 29. Identify the barriers which may prevent clients achieving their nutritional goals
- 30. Identify how to apply basic motivational strategies to encourage healthy eating and prevent non-compliance or relapse
- 31. Describe the Principles of balanced nutrition to include:
  - · energy balance
  - · recommended daily intake of nutrients
  - fuel for exercise
  - fuel for minimising post-exercise fatigue and maximising recovery
  - hydration levels
  - food groups
  - dietary guidelines
  - essential nutrients
  - food labelling and preparation
- 32. Describe the nutritional requirements and hydration needs of clients engaged in physical activity
- 33. Describe your professional boundaries and the role and limitations of exercise professionals in providing healthy eating information and situations requiring advice from suitably qualified medical or allied health professionals
- 34. Describe why detailed or complex dietary analysis that incorporates major dietary change should always be referred to a medical professional such as a Registered Dietician



- 35. Identify the circumstances in which a client should be recommended to visit their doctor about the possibility of referral to a Registered Dietician
- 36. Describe the need for reappraisal of clients' body composition and other relevant health parameters at agreed stages of the programme
- 37. Follow legal and ethical requirements for the security and confidentiality of client information

## Plan how to apply the principles of nutrition and weight management to an exercise programme

- 38. Agree with clients short, medium and long-term nutritional goals appropriate to their needs
- 39. Access and make use of credible sources of information and advice in establishing nutritional goals with clients
- 40. Ensure that the nutritional goals support and integrate with other programme components
- 41. Identify potential barriers to clients achieving goals and identify and agree strategies to prevent non-compliance or relapse
- 42. Record information about clients and their nutritional goals in an approved format
- 43. Identify when clients need referral to another professional such as a medical professional or qualified nutritionist
- 44. Identify and agree review points

#### Apply the principles of nutrition and weight management to an exercise programme

- 45. Monitor, evaluate and review the clients' progress towards their nutrition and weight management goals
- 46. Apply body-composition management guidelines to develop an exercise plan relevant to the clients' goals and fitness levels
- 47. Utilise the principles of balanced nutrition to provide healthy eating advice for clients
- 48. Outline healthy eating options and hydration requirements for the exercise plan to clients
- 49. Provide current and accurate general healthy eating advice from national or international best practice guidelines appropriate to the needs and goals of clients and recognise and refer situations outside own scope of practice to other professionals
- 50. Discuss and confirm the exercise plan and healthy eating advice with clients
- 51. Apply principles of motivation and behaviour modification to encourage exercise and healthy eating adherence

#### Modify and review nutrition and weight management strategies

- 52. Determine the appropriate exercise modifications or changes to healthy eating advice in conjunction with relevant medical or allied health professionals
- 53. Communicate proposed changes to the exercise plan or healthy eating advice and reason for any change to clients
- 54. Reappraise clients' body composition at agreed stages of the program
- 55. Review client short and long-term goals and exercise plan



#### Unit 6 (C4) Apply the principles of exercise science to programme design

This section covers the following knowledge, which must be delivered in full to the learners:

- Apply knowledge of musculoskeletal anatomy to programme design
- Apply knowledge of biomechanics to programme design
- Apply knowledge of physiology to programme design
   The guided Learning hours (GLH) required to deliver and assess this unit is 30 hours.

#### Knowledge to be covered

#### Apply knowledge of musculoskeletal anatomy to programme design

- 1. Apply knowledge of skeletal anatomy to exercise planning, programming and instruction, to include:
  - joints in the skeleton
  - the structure and function of the skeleton
- 2. Describe the specific structure and roles of:
  - the central nervous system (CNS)
  - the peripheral nervous system (PNS) including somatic and autonomic systems
  - nervous control and transmission of a nervous impulse
  - a neuron
- 3. Apply knowledge of the integrated monitoring and control of skeletal muscle contraction by the nervous system to exercise planning, programming and instruction
- 4. Describe structure and function of muscles to include:
  - cellular structure of muscle fibres
  - sliding filament theory
  - effects of different types of exercises on muscle fibre type
  - muscle attachment sites for the major muscles of the body
  - structure, range of motion and function of muscles, muscle groups and directional terms
  - location and function of skeletal muscle involved in physical activity
  - a motor unit
  - muscle proprioceptors and the stretch reflex
- 5. Describe reciprocal inhibition and its relevance to exercise
- 6. Apply knowledge of the structure, range of motion, muscle groups and directional terms to exercise planning, programming and instruction to include:
  - anatomical axis and planes with regard to joint actions and different exercises
  - joint actions brought about by specific muscle group contractions
  - joints/joint structure with regard to range of motion/ movement and injury risk
  - joint movement potential and joint actions
- 7. Describe the neuromuscular adaptations associated with exercise/ training
- 8. Describe the benefits of improved neuromuscular coordination/ efficiency to exercise performance

#### Apply knowledge of biomechanics to programme design

- 9. Describe the forces which act on the body during exercise
- 10. Analyse and apply the forces acting on the body during exercise and basic mechanical concepts to exercise
- 11. List the common biomechanical terms used to qualify the basic principles of biomechanics



- 12. Use the common biomechanical terms when instructing fitness activities
- 13. Describe the effects of lever systems in the body
- 14. Use the lever systems in the human body and their role in movement and stability to provide safe and effective exercises for clients
- 15. Use resistance equipment to alter the force required by muscles and affect joint stability when developing programs and instructing fitness activities
- 16. Describe the effect of changes in lever length on muscle force output in both anatomical and mechanical lever when instructing fitness activities
- 17. The structure and function of the stabilising ligaments and muscles of the spine
- 18. Describe the local muscle changes that can take place due to insufficient stabilisation
- 19. Describe the potential effects of poor posture on movement efficiency
- 20. Describe the potential problems that can occur as a result of postural deviations
- 21. Analyse the benefits, risks and applications of the following types of stretching:
  - static (passive and active)
  - dynamic
  - proprioceptive neuromuscular facilitation (PNF)
- 22. Different exercises that can improve posture
- 23. Describe the function and structure of the following:
  - the heart valves
  - coronary circulation
- 24. Apply knowledge of the structure and function of the cardiovascular system to exercise
- 25. Describe the short and long term effects of exercise on blood pressure, including the Valsalva effect
- 26. Describe the cardiovascular benefits and risks of endurance/aerobic training
- 27. Identify the blood pressure classifications and associated health risks
- 28. Apply knowledge of the structure, processes and function of body energy systems involved in the storage, transport, and utilisation of energy
- 29. Explain the contribution of energy according to:
  - duration of exercise/activity being performed
  - type of exercise/activity being performed
  - intensity of exercise/activity being performed
- 30. Describe the by-products of the three energy systems and their significance in muscle fatigue
- 31. The effect of endurance training/advanced training methods on the use of fuel for exercise
- 32. Identify the cardiovascular and respiratory adaptations to endurance/ aerobic training
- 33. Apply knowledge of the physiological responses of the human body to physical activity and exercise
- 34. Apply knowledge of the physiological adaptations and weight bearing of the human body to regular exercise to exercise planning, programming and instruction to include:
  - The effects of exercise on bones and joints including the significance of weight bearing exercise



- 35. Apply knowledge of the physiological responses to physical activity in various environmental conditions to exercise planning, programming and instruction
- 36. Describe delayed onset of muscle soreness (DOMS), identify exercises or techniques likely to cause delayed onset of muscle soreness
- 37. Identify the short and long-term effects of different types of exercise on muscle
- 38. Analyse the benefits and limitations of different methods of monitoring exercise intensity including: the talk test, Rate of Perceived Exertion (RPE)
- 39. Describe heart rate monitoring and the use of different heart rate zones
- 40. Describe physiological responses to physical activity in various environmental conditions

# Unit 7 (D2) Support long term behaviour change by monitoring client exercise adherence and applying motivational techniques

This section covers the following knowledge, which must be delivered in full to the learners:

- Collect information to assist clients to develop strategies for long-term behaviour change
- Assist clients to develop strategies for long-term behaviour change
- Assist clients to implement strategies to improve client exercise adherence
   The guided Learning hours (GLH) required to deliver and assess this unit is 25 hours.

#### **Knowledge to be covered**

Collect information to assist clients to develop strategies for long-term behaviour change

- 1. Describe behavioural strategies and principles to enhance exercise, health behaviour change and lifestyle modifications to include:
  - cognitive processes,
  - behavioural processes
  - changes to exercise behaviour
  - changes to dietary intake
  - lifestyles changes
- 2. Describe stages of motivational readiness and processes of change to include:
  - pre-contemplation
  - contemplation
  - preparation
  - action
  - maintenance
  - relapse
- 3. Identify types of motivation, theory of achievement motivation and specific techniques to enhance motivation to include:
  - health belief model
  - trans-theoretical model
  - motivational change model
  - social cognitive model
  - theory of planned behaviour
  - relapse prevention mode
- 4. Describe a range of different strategies to improve exercise adherence including:
  - prompts



- contracting
- perceive choice
- reinforcement
- feedback
- rewards
- self-monitoring
- goal setting
- social support
- decision balance sheet
- physical setting
- exercise variety
- minimised discomfort and injury
- group training
- enjoyment
- periodic fitness and health assessment
- progress charts
- 5. Identify how the personal and environmental factors which can affect exercise adherence
- 6. Describe the role of intrinsic and extrinsic motivation in exercise behaviour
- 7. Identify methods of:
  - evaluating self-motivation
  - evaluating self-efficacy
  - evaluating readiness for behaviour change
- 8. Describe the arousal and anxiety theory, and its relationship to exercise performance, adherence and behaviour change to include:
  - anxiety management
  - progressive relaxation
  - stress management
  - visualisation
  - self-talk
- 9. Describe personal and situational factors which can affect exercise adherence to include:
  - personality
  - self-concept
  - efficacy
  - habits
  - lifestyle
  - family situation
- 10. Identify a range of different barriers to exercise to include:
  - lack of time
  - lack of energy
  - lack of motivation
  - excessive cost
  - illness or injury
  - feeling uncomfortable
  - lack of skill
  - fear of injury
  - fear of safety
  - · lack of child care



- insufficient access
- lack of support
- lack of transportation
- 11. Obtain information about clients' current exercise behaviour and their attitude towards exercise to determine the stage of readiness to change behaviour to include:
  - client expectations,
  - coping techniques,
  - defence mechanisms,
  - belief systems and values,
  - social support systems,
  - stage of readiness for change
- 12. Assess the level of motivation, commitment and confidence of clients to change attitudes, beliefs and behaviour to include components of motivation:
  - direction of effort,
  - intensity of effort
  - persistence of behaviour
- 13. Identify a range of goal setting techniques/principles to include:
  - short, medium and long terms goals,
  - SMART goals,
  - outcome, process and performance goals,
  - goal achievement strategies,
  - goal support,
  - evaluation and feedback,
  - recording goals,
  - linked to personality and motivation
- 14. Identify clients' goals for taking part in regular physical activity and readiness to change behaviour
- 15. Analyse the clients' lifestyle and identify opportunities for exercise and physical activity
- 16. Identify the clients' preferences for exercise
- 17. Identify appropriate incentives and rewards for the clients taking part in physical activity
- 18. Identify clients' perceived barriers to exercise and other factors that may impact negatively on the success of exercise behaviour change

#### Assist clients to develop strategies for long-term behaviour change

- 19. Implement effective goal setting to support clients to adhere to long term exercise behaviour
- 20. Present motivational strategies appropriate to individual client, social and cultural differences, needs, barriers and other influences
- 21. Work with the clients to select and adapt a long-term strategy to adhere to exercise and physical activity, building on opportunities, preferences and incentives and minimising barriers
- 22. Ensure chosen strategies to motivate exercise behaviour change are based on behaviour change models, processes of change, evidence-based research and client characteristics
- 23. Emphasise short and long-term benefits of regular exercise to encourage exercise behaviour change
- 24. Emphasise short and long-term benefits of regular exercise to encourage exercise behaviour change



- 25. Recognise and take account of common reasons for discontinuation of exercise programmes when setting programme guidelines
- 26. Use the physical and the psychological characteristics that apply to each stage of fitness, stages of change and the most appropriate form of motivation at each level

#### Assist clients to implement strategies to improve client exercise adherence

- 27. Work with clients to encourage mutual trust, openness and a willingness to take responsibility for their own fitness and behaviour change
- 28. Provide support to clients' adherence strategy to achieve long-term behaviour change in line with their goals
- 29. Monitor the clients' adherence to exercise and physical activity
- 30. Demonstrate an understanding of the determinants of exercise adherence that influence an individual's behaviour
- 31. Demonstrate appropriate manner, empathy and patience when working with clients embarking on behaviour change
- 32. Monitor and review progress regularly to reinforce efforts
- 33. Identify on-going barriers to continuation of long term exercise and provide motivational strategies as appropriate
- 34. Assess changes in behaviour in collaboration with the client to determine the effectiveness of the strategies implemented and make appropriate adjustments
- 35. Monitor attendance against the client's exercise plan and intervene to maintain client attendance
- 36. Communicate effectively with the client both verbally and non-verbally