

## Diploma in Personal Training Qualification Standards

### Content covered in the Diploma in Personal Training qualification

These standards describe the competence required to instructor gym and personal training sessions. The Diploma in Personal Training requires 275 hours Total Learning Time (TLT) which must include 9 days' practical face-to-face tuition.

*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 \(A1\) Conduct health screening and assess client exercise preferences, barriers and goals](#)

[Unit 2 \(A2\) Carry out client fitness assessments](#)

[Unit 3 \(B1\) Apply principles of anatomy and physiology in a fitness context](#)

[Unit 4 \(D1\) Provide motivation and support as part of exercise instruction](#)

[Unit 5 \(D2\) Support long term behaviour change by monitoring client exercise adherence and applying motivational techniques](#)

[Unit 6 \(D3\) Promote healthy eating and physical activity](#)

[Unit 7 \(C3\) Apply the principles of nutrition and weight management to programme design](#)

[Unit 8 \(G1\) Promote health and safety in a fitness environment](#)

[Unit 9 \(H1\) Provide customer service in health and fitness](#)

[Unit 10 \(I1\) Develop professional practice and personal career in the health and fitness industry](#)

[Unit 11 \(B3/C1\) Plan exercise training programmes](#)

[Unit 12 \(C4\) Apply the principles of exercise science to programme design](#)

[Unit 13 \(B3/B8\) Instruct, supervise and deliver training programmes](#)

[Gym Exercise – Equipment and Training Specification](#)

[Unit 14 \(C2\) Manage, review, adapt and evaluate personal training programmes.](#)

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

## Unit 1 (A1) Conduct health screening and assess client exercise preferences, barriers and goals

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

- Conduct health screening
- Agree fitness activities with clients
- Goal Setting

**The Guided Learning Hours (GLH) required to deliver and assess this unit is 15 hours.**

### Knowledge to be covered

#### Conduct health screening

1. Conduct relevant health screening with clients
2. How to establish a rapport with clients, taking account gender, age and social class. Show sensitivity and empathy to clients and the information they provide
3. Agree with clients their needs and readiness to participate
4. Know how to show empathy and be sensitive to client's goals and current stage of readiness.
5. Ensure clients understands the reasons for collecting information and how you will use it, ensure you maintain professional boundaries and refer if needed to another health professional.
6. Identify why it is important to screen clients and collect accurate information about clients
7. Consider how to collect the required information accurately<sup>SEP</sup>
8. Describe the principles of informed consent
9. Analyse the strengths and weaknesses of the various methods of collecting information for different types of clients, such as:
  - beginners
  - advanced
  - inexperienced
10. Record the information using appropriate formats in a way that will aid analysis, these could include:
  - interview
  - questionnaire
  - observation
  - physical/fitness assessments
11. Decide how to collect client's health screening information and how to use health screening effectively to obtain information such as:
  - lifestyle evaluation
  - current fitness profile
  - time availability
  - exercise and training history
  - exercise preferences (activity likes and dislikes)
  - attitude
  - stage of readiness
  - motivation to participate and barriers to participation
  - exercise contraindications

	<ul style="list-style-type: none"> <li>• specific fitness goals</li> <li>• identify clients' needs and potential</li> <li>• identify any possible risks from participation in a gym programme and plan how to minimise them</li> <li>• medical history</li> <li>• medications</li> <li>• informed consent</li> <li>• current fitness level (could include fitness testing using correct protocols)</li> <li>• posture and alignment</li> <li>• functional ability</li> <li>• clearance letter from an allied health professional or medical practitioner if needed.</li> </ul>
12.	<p>Follow correct protocol for screening, ensure correct storage and disposal of information, Follow legal and ethical requirements for the security and confidentiality of client information such as:</p> <ul style="list-style-type: none"> <li>• confidentiality</li> <li>• informed consent</li> <li>• data protection</li> <li>• ensure legal or ethical and cultural considerations are met</li> </ul>
13.	Recognise any cultural barriers to exercise and personal training sessions
14.	Explain the personal trainer role and responsibilities to clients
15.	Consider the factors, based on client screening, which may affect safe exercise participation, know how to identify and agree goals and objectives for a programme based on collected information
16.	Consider medical and health conditions indicating the need for temporary deferral of exercise and/or referral to other professionals or for a medical clearance before beginning any fitness assessments or activities.
17.	Analyse and interpret all the information collated regarding the client, identify any contraindications to them participating in exercise
<b>Agree fitness activities with clients</b>	
18.	Provide relevant information on the benefits of exercise and the impact of poor lifestyle behaviours on health and fitness to clients
19.	Establish the physical, psychological and social reasons for clients' participation in an exercise program, help clients to identify barriers to adherence and how to overcome them.
20.	Identify the joint movements and muscles that client needs to target or strengthen based on the screening information collected.
<b>Goal Setting</b>	
21.	Implement effective goal setting to support clients to adhere to long term exercise behaviour
22.	Work with clients to agree goals to include short, medium and long-term goals appropriate to their needs, ensure you manage their expectations regarding these goals
23.	Identify potential barriers to clients achieving their goals and discuss possible solutions to these barriers and to prevent drop out or relapse
24.	Identify clients' fitness requirements and provide clear information about appropriate exercise programmes to help them meet their goals, discuss the benefits of a range of suitable activities for them.

## Unit 2 (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 15 hours.**

### Knowledge to be covered

#### Prepare to assess client fitness

1. Explain to clients why fitness assessments are relevant to an individualised exercise programme
2. Decide with client's what information to collect through fitness assessments
3. Choose fitness assessments appropriate to clients' current fitness capacity and readiness to participate
4. Explain the aims of planned fitness assessments to clients and what these assessments will involve
5. Describe how you determined which methods of collecting information are appropriate according to the individual
6. Consider alternatives to physical fitness assessments
7. Describe the Principles of informed consent
8. Explain clients' rights and ensure they provide consent to take part in fitness assessments
9. Organise the equipment so that fitness assessments can be carried out as planned

#### Conduct fitness assessments

10. Describe Fitness industry standards and practices for the conduct of safe fitness assessments
11. Demonstrate correct use of fitness assessment equipment
12. 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.)
13. Use correct formats for recording information, ensuring information is accessible for consideration during retesting in the future
14. Analyse the strengths and weaknesses of the various methods of fitness assessment for different types of clients
15. Use alternative methods of data collection where the use of the tests listed above is not

appropriate for client needs and readiness
16. Apply effective contingency management techniques to deal with a range of problems and issues that may arise during fitness assessments
17. Show empathy for clients and put clients at ease during the fitness assessment process. Show sensitivity to clients' goals and current stage of readiness
18. Take account of all relevant safety considerations, including client monitoring during fitness assessments
19. Record fitness assessment results in a way that will help to analyse them
<b>Analyse and record current levels of client fitness</b>
20. Organise the information in a way which will help to interpret and analyse it
21. Process assessment results according to protocol and calculation requirements
22. Analyse the results of fitness assessments according to protocol and calculation requirements
23. Analyse the collected information in order to identify clients' needs and goals
24. Record recommendations for the client's exercise programme
25. Provide feedback to clients about their current levels of fitness
26. Communicate assessment data to clients using basic language which is free of jargon
27. Explain the results of the fitness assessments and the implications for exercise programme design
28. Explain the impact of reliability and validity on the value of exercise testing to clients
29. Treat client information with sensitivity and discretion
30. Make informed recommendations to clients on appropriate exercise programmes
31. Refer any clients whose needs and potential they cannot meet to another professional, including more experienced/ qualified fitness professionals
32. Maintain client confidentiality and ensure ethical and compliant collection of information
33. Seek feedback from clients to ensure the assessment results were understood
34. Know how to identify personal training goals with the client
35. Describe why it is important to base goal set with client
36. 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: <ul style="list-style-type: none"> <li>• Clients' general health and fitness</li> <li>• Physiological</li> <li>• Psychological</li> <li>• Lifestyle</li> <li>• Social</li> <li>• Functional ability</li> <li>• Barriers to exercise</li> <li>• Clients fear and reservations about physical activity</li> </ul>
<b>Providing feedback to clients on the results of fitness assessments</b>
37. Use suitable methods of communicating results to clients

38.	Identify how to use the results of fitness assessments in programme design
39.	Consider the types of errors that can occur during exercise testing
40.	Identify methods to improve the validity and reliability of testing for exercise clients
41.	Consider the impact of poor validity and reliability on exercise testing results in relation to exercise client motivation and programme design
42.	Identify professional limitations relating to safe operation and scope of practice
43.	Follow legal and organisational requirements for data protection and confidentiality

### Unit 3 (B1) Apply principles of anatomy and physiology in a fitness context

This section covers the following knowledge, which must be delivered and assessed in full:

- Anatomical and physiological terminology
- Be able to apply anatomy and physiology knowledge to exercise planning and instruction
- Apply knowledge of the body's systems to exercise planning and instruction

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

#### Knowledge to be covered

##### Anatomical and physiological terminology

1. Anatomical and physiological terminology and describe and demonstrate movements of the body to clients

#### Be able to apply anatomy and physiology knowledge to exercise planning and instruction

2. Be able to apply anatomy and physiology knowledge to exercise planning and instruction to include:
  - a. the structure and function of the skeletal system**
    - basic functions of the skeleton
    - structures of the axial skeleton
    - structures of the appendicular skeleton
    - classification of bones
    - structure of long bone
    - stages of bone growth
    - potential ranges of motion of the spine
  - b. the structure and function of Joints in the skeleton**
    - classification of joints,
    - structure of synovial joints
    - types of synovial joints and their range of motion
    - joint movement potential and joint actions
  - c. The structure and function of the circulatory system**
    - location, function and structure of the heart
    - how blood moves through the four chambers of the heart
    - heart rates, stroke volume and cardiac output
    - systemic and pulmonary circulation
    - the structure and functions of blood vessels
    - blood pressure
    - blood pressure classifications
  - d. The structure and function of the respiratory system**

<ul style="list-style-type: none"> <li>• location, function and structure of the lungs</li> <li>• main muscles involved in breathing</li> <li>• passage of air through the respiratory tract               <ul style="list-style-type: none"> <li>▪ process of gaseous exchange of oxygen and carbon dioxide in the lungs</li> </ul> </li> <li>• the structure and function of the cardiovascular system</li> </ul> <p><b>e. The structure and function of the muscular system</b></p> <ul style="list-style-type: none"> <li>• the three types of muscle tissue</li> <li>• the characteristics and functions of the three types of muscle tissue</li> <li>• the basic structure of skeletal muscle</li> <li>• names and locations the skeletal muscles</li> <li>• structure and function of the pelvic floor muscles</li> <li>• different types of muscle action</li> <li>• joint actions brought about by specific muscle group contractions</li> <li>• skeletal muscle fibre types and their characteristics</li> </ul> <p><b>f. The structure and function of the nervous system</b></p> <ul style="list-style-type: none"> <li>• role and functions of the nervous system</li> <li>• principles of muscle contraction</li> <li>• 'all or none law'/motor unit recruitment</li> <li>• how physical activity can enhance neuromuscular connections and improve motor fitness</li> </ul>
<b>Apply knowledge of the body's systems to exercise planning and instruction</b>
<p>3. Apply knowledge of the body's systems to exercise planning and instruction, to include:</p> <ul style="list-style-type: none"> <li>• consideration of joint type and risk of injury</li> <li>• structure of muscles and the process of contraction</li> </ul>
<p>4. Apply knowledge of the integrated monitoring and control of skeletal muscle contraction by the nervous system to exercise planning, programming and instruction</p>
<p>5. Apply knowledge of the structure, range of motion, muscle groups and directional terms to exercise planning, programming and instruction to include:</p> <ul style="list-style-type: none"> <li>• Anatomical axis and planes with regard to joint actions and different exercises</li> <li>• Joint actions brought about by specific muscle group contractions</li> <li>• Joints/joint structure with regard to range of motion/ movement and injury risk</li> <li>• Joint movement potential and joint actions</li> </ul>
<p>6. Be able to analyse which joints and muscles are being utilised in an exercise and their role in the movement.</p>
<p>7. Know and apply correct postural alignment for exercises to include:</p> <ul style="list-style-type: none"> <li>• the curves of the spine</li> <li>• neutral spine alignment</li> <li>• postural deviations to include kyphosis, lordosis, scoliosis and the effect of pregnancy</li> </ul>
<p>8. Describe reciprocal inhibition and its relevance to exercise</p>
<p>9. Describe the neuromuscular adaptations associated with exercise/ training</p>
<p>10. Describe the benefits of improved neuromuscular coordination/ efficiency to exercise performance</p>
<p>11. The body's energy systems and how they work at different exercise intensities</p> <ul style="list-style-type: none"> <li>• how carbohydrates, fats and proteins are used in the production of energy/adenosine triphosphate</li> <li>• the use of the three energy systems during aerobic and anaerobic activity</li> </ul>
<p>12. The immediate physiological responses and physiological adaptations of the body's systems</p>

	to exercise, for example the heart rate increasing as the client begins their warm up on the bike.
13.	The effects of starting, continuing and stopping, different types of training, described in terms of their physiological responses for example increase in heart rate, releases of hormones, neuromuscular activation, changes to breathing rate.

#### Unit 4 (D1) Provide motivation and support as part of exercise instruction

This section covers the following knowledge, which must be delivered and assessed in full:

- Assist clients to develop motivational strategies
- Support client motivation
- 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 10 hours.**

#### Knowledge to be covered

##### Assist clients to develop motivational strategies

1. Identify clients' reasons for taking part in regular exercise and physical activity
2. Identify clients' preferences for exercise and describe why incorporating clients' exercise preferences into their programme can strengthen motivation and adherence.
3. Ensure clients understand the benefits of taking part in exercise and physical activity
4. Provide clients with correct information about the amount of physical activity required to achieve health benefits
5. Inform clients about opportunities for regular physical activity appropriate to their needs, abilities and preferences
6. Describe the typical goals and expectations that clients may have
7. Identify a range of potential 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
8. Describe personal and situational factors which can affect exercise adherence to include:
  - personality
  - self-concept
  - efficacy
  - habits
  - lifestyle



	<ul style="list-style-type: none"> <li>• family situation</li> </ul>
<b>Support client motivation</b>	
9.	Help clients to develop and follow through their own motivational strategies to help them to adhere to an exercise programme. You will need to consider Personal attitudes, actions and values to positively influence clients exercise adherence, confidence and behaviour, environmental and cognitive factors and their potential effect on exercise adherence
10.	Describe a range of different strategies to improve exercise adherence including: <ul style="list-style-type: none"> <li>• prompts</li> <li>• contracting</li> <li>• perceive choice</li> <li>• reinforcement</li> <li>• feedback</li> <li>• rewards</li> <li>• self-monitoring</li> <li>• goalsetting</li> <li>• social support</li> <li>• decision balance sheet</li> <li>• physical setting</li> <li>• exercise variety</li> <li>• minimised discomfort and injury</li> <li>• group training</li> <li>• enjoyment</li> <li>• periodic fitness and health assessment</li> <li>• progress charts</li> </ul>
11.	Apply a variety of motivational techniques when training clients
12.	Describe behavioural strategies and principles to enhance exercise, health behaviour change and lifestyle modifications to include: <ul style="list-style-type: none"> <li>• cognitive processes,</li> <li>• behavioural processes</li> <li>• changes to exercise behaviour</li> <li>• changes to dietary intake</li> <li>• lifestyles changes</li> </ul>
13.	Describe different behaviour change approaches to encourage adherence to exercise/physical activity and create appropriate intervention strategies for each stage of behavioural change
14.	Present motivational strategies appropriate to individual client, social and cultural differences, needs, barriers and other influences
15.	Describe stages of motivational readiness and processes of change to include: <ul style="list-style-type: none"> <li>• pre-contemplation</li> <li>• contemplation</li> <li>• preparation</li> <li>• action</li> <li>• maintenance</li> <li>• relapse</li> </ul>
16.	Describe the requirements for successful behavioural change
17.	Describe the stages of change (Stages of change model) a person may go through when taking part in regular exercise and different behaviour change approaches that can be used to

	encourage adherence to exercise
18.	Describe the human behavioural change related to the different stages of change
19.	Identify types of motivation, theory of achievement motivation and specific techniques to enhance motivation to include: <ul style="list-style-type: none"> <li>• health belief model</li> <li>• trans-theoretical model</li> <li>• motivational change model</li> <li>• social cognitive model</li> <li>• theory of planned behaviour</li> <li>• relapse prevention mode</li> </ul>
20.	Identify and analyse how the personal, environmental and cognitive factors and their potential effect on exercise adherence
21.	Describe the use of incentives and rewards that can strengthen clients' motivation and adherence that can be specific to different clients
22.	Describe the role of intrinsic and extrinsic motivation in exercise behaviour
23.	Identify methods of: <ul style="list-style-type: none"> <li>• evaluating self-motivation,</li> <li>• evaluating self-efficacy</li> <li>• evaluating readiness for behaviour change</li> </ul>
24.	Describe the arousal and anxiety theory, and its relationship to exercise performance, adherence and behaviour change to include: <ul style="list-style-type: none"> <li>• anxiety management</li> <li>• progressive relaxation</li> <li>• stress management,</li> <li>• visualisation</li> <li>• self-talk</li> </ul>
25.	Obtain information about clients' current exercise behaviour and their attitude towards exercise to determine the stage of readiness to change behaviour to include: <ul style="list-style-type: none"> <li>• client expectations,</li> <li>• coping techniques,</li> <li>• defence mechanisms,</li> <li>• belief systems and values,</li> <li>• social support systems</li> <li>• stage of readiness for change</li> </ul>
26.	Assess the level of motivation, commitment and confidence of clients to change attitudes, beliefs and behaviour to include components of motivation: <ul style="list-style-type: none"> <li>• direction of effort,</li> <li>• intensity of effort</li> <li>• persistence of behaviour</li> </ul>
27.	Identify a range of goal setting techniques/principles to include: <ul style="list-style-type: none"> <li>• short, medium and long terms goals</li> <li>• smart goals</li> <li>• outcome, process and performance goals</li> <li>• goal achievement strategies</li> <li>• goal support</li> <li>• evaluation and feedback</li> <li>• recording goals</li> </ul>

	<ul style="list-style-type: none"> <li>linked to personality and motivation</li> </ul>
28.	Provide positive reinforcement and feedback to clients to positively influence exercise behaviour and increase client's confidence
29.	Understand why it's important for clients to take personal responsibility for their own fitness and motivation and use methods to use there are able to do this.
<b>Assist clients to develop strategies for long-term behaviour change</b>	
30.	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
31.	Ensure chosen strategies to motivate exercise behaviour change are based on behaviour change models, processes of change, evidence-based research and client characteristics
32.	Ensure chosen strategies to motivate exercise behaviour change are based on behaviour change models, processes of change, evidence-based research and client characteristics
33.	Assist clients to develop their own strategy for motivation and adherence
34.	Emphasise short and long-term benefits of regular exercise to encourage exercise behaviour change
35.	Emphasise short and long-term benefits of regular exercise to encourage exercise behaviour change
36.	Recognise and take account of common reasons for discontinuation of exercise programmes when setting programme guidelines
37.	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
38.	Describe how to form effective working relationships with clients
39.	Describe how to interpret client responses including body language and other forms of behaviour especially when undertaking exercise
<b>Assist clients to implement strategies to improve client exercise adherence</b>	
40.	Work with clients to encourage mutual trust, openness and a willingness to take responsibility for their own fitness and behaviour change
41.	Provide support to clients' adherence strategy to achieve long-term behaviour change in line with their goals
42.	Monitor the clients' adherence to exercise and physical activity
43.	Demonstrate an understanding of the determinants of exercise adherence that influence an individual's behaviour
44.	Demonstrate appropriate manner, empathy and patience when working with clients embarking on behaviour change
45.	Monitor and review progress regularly to reinforce efforts
46.	Identify on-going barriers to continuation of long term exercise and provide motivational strategies as appropriate
47.	Assess changes in behaviour in collaboration with the client to determine the effectiveness of the strategies implemented and make appropriate adjustments
48.	Monitor attendance against the client's exercise plan and intervene to maintain client attendance
49.	Communicate effectively with the client both verbally and non-verbally

## Unit 5 (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 10 hours.**

### Knowledge to be covered

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

1. 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

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

2. Describe the importance of long-term behaviour change and how to ensure clients understand and commit themselves to long-term change
3. Implement effective goal setting to support clients to adhere to long term exercise behaviour
4. Present motivational strategies appropriate to individual client, social and cultural differences, needs, barriers and other influences
5. 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
6. Ensure chosen strategies to motivate exercise behaviour change are based on behaviour change models, processes of change, evidence-based research and client characteristics
7. Emphasise short and long-term benefits of regular exercise to encourage exercise behaviour change
8. Emphasise short and long-term benefits of regular exercise to encourage exercise behaviour change
9. Recognise and take account of common reasons for discontinuation of exercise programmes when setting programme guidelines
10. 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

11. Describe the importance of clients understanding the advantages of taking part in a personal training programme and identifying any obstacles they may face.
12. Create strategies which can prevent drop out or relapse
13. Develop objectives for the programme and each phase of the programme, in consultation with clients

14.	Record the agreed goals in a format that is clear to clients, the personal trainer and others who may be involved in the programme
15.	Identify and agree strategies to prevent drop out or relapse
16.	Agree how to maintain contact with clients between sessions
17.	Work with clients to encourage mutual trust, openness and a willingness to take responsibility for their own fitness and behaviour change
18.	Provide support to clients' adherence strategy to achieve long-term behaviour change in line with their goals
19.	Monitor the clients' adherence to exercise and physical activity
20.	Demonstrate an understanding of the determinants of exercise adherence that influence an individual's behaviour
21.	Demonstrate appropriate manner, empathy and patience when working with clients embarking on behaviour change
22.	Monitor and review progress regularly to reinforce efforts
23.	Identify on-going barriers to continuation of long term exercise and provide motivational strategies as appropriate
24.	Assess changes in behaviour in collaboration with the client to determine the effectiveness of the strategies implemented and make appropriate adjustments
25.	Monitor attendance against the client's exercise plan and intervene to maintain client attendance
26.	Communicate effectively with the client both verbally and non-verbally

### Unit 6 (D3) Promote healthy eating and physical activity

This section covers the following knowledge, which must be delivered and assessed in full:

- Promote healthy eating and nutrition to clients
- Support fitness clients with body image issues
- The role of the body's energy systems

**The Guided Learning Hours (GLH) required to deliver and assess this unit is 15 hours.**

#### Knowledge to be covered

##### Promote healthy eating and nutrition to clients

1. Describe the structure and function of the digestive system and the effects of healthy eating on the other major body systems
2. Explain the concept of a healthy eating, well-balanced diet and regular exercise to promote and improve overall good health, to include:
  - providing information in a manner that fosters a positive attitude towards food and eating
  - recognise indicators of poor body image and discuss body satisfaction with clients
  - show sensitivity to cultural and social differences
  - use knowledge of the structure and function of the digestive system when providing information to clients
  - explain the factors that influence fat loss response to exercise to enable effective goal setting
3. Explain the general principles of healthy eating including:
  - The main food groups and the nutrients they contribute to the diet

	<ul style="list-style-type: none"> <li>• national dietary guidelines</li> <li>• carbohydrates</li> <li>• lipids</li> <li>• cholesterol</li> <li>• protein</li> <li>• minerals</li> <li>• vitamins</li> <li>• fluid and electrolytes</li> <li>• intake of nutrients</li> <li>• balanced diet</li> <li>• food preparation</li> <li>• myths and fallacies</li> <li>• nutritional supplementation</li> <li>• energy balance</li> <li>• recommended daily intake of nutrients</li> <li>• fuel for exercise</li> <li>• fuel for minimising post-exercise fatigue and maximising recovery</li> <li>• hydration levels</li> </ul>
4.	<p>Describe the meaning of key nutritional terms including:</p> <ul style="list-style-type: none"> <li>• diet</li> <li>• healthy eating</li> <li>• nutrition</li> <li>• balanced diet</li> <li>• body composition</li> <li>• the calorific value of nutrients</li> </ul>
5.	<p>Provide healthy eating advice to include:</p> <ul style="list-style-type: none"> <li>• general healthy eating principles</li> <li>• dietary guidelines and recommendations</li> <li>• relevant nutritional guidelines</li> </ul>
6.	<p>Describe the relationship between healthy eating options and current dietary guidelines for a balanced diet to enable the provision of accurate information to clients</p>
7.	<p>Explain a range of dietary trends which may include:</p> <ul style="list-style-type: none"> <li>• fad' or popular diets</li> <li>• nutritional supplementation</li> <li>• healthy eating ergogenic aids</li> </ul>
8.	<p>Describe the potential health and performance implications of severe energy restriction, weight loss and weight gain</p>
9.	<p>Describe the importance of communicating health risks associated with weight loss fads and popular diets to clients</p>
10.	<p>Describe the Safety, effectiveness and contraindications relating to protein and vitamin supplementation</p>
11.	<p>Describe the relationship between nutrition, physical activity, body composition and health including:</p> <ul style="list-style-type: none"> <li>• links to disease/disease risk factors</li> <li>• cholesterol</li> <li>• types of fat in the diet</li> </ul>
12.	<p>Describe industry standards and appropriate protocols for giving healthy eating information to clients, to include:</p>

<ul style="list-style-type: none"> <li>• how and when to refer clients with healthy eating or dietary concerns to a suitably qualified medical professional/ dietician</li> <li>• understanding the scope of practice for exercise professionals in providing advice, how to remain within professional boundaries</li> <li>• how to work within the current legal and ethical limitations of their profession in providing healthy eating information</li> <li>• show sensitivity to cultural and social differences</li> </ul>
13. Describe how to access reliable sources of nutritional information
<b>Support fitness clients with body image issues</b>
14. Describe the management of body composition including: <ul style="list-style-type: none"> <li>• metabolism</li> <li>• balance between energy intake and energy expenditure</li> <li>• energy expenditure</li> <li>• energy intake</li> <li>• changes to body composition</li> <li>• muscle gain</li> </ul>
15. Implement strategies to promote body satisfaction when providing information about exercise, physical activity, fitness testing and healthy eating options. To include the following healthy eating or dietary concerns: <ul style="list-style-type: none"> <li>• anorexia</li> <li>• bulimia</li> <li>• overweight or obesity</li> <li>• nutritional deficiencies including iron</li> <li>• calcium</li> <li>• dehydration</li> <li>• diabetes</li> </ul>
16. Describe how to recognise the signs and symptoms of disordered eating and healthy eating patterns
17. Describe how to deal with clients at risk of nutritional deficiencies
18. Describe the guidelines for developing exercise plans to change body composition
19. Describe the factors that influence fat-loss response to exercise to enable effective goal setting
20. Describe the function and metabolism of: <ul style="list-style-type: none"> <li>• macro nutrients</li> <li>• micro nutrients</li> </ul>
21. Describe how to deal with clients at risk of nutritional deficiencies
<b>The role of the body's energy systems</b>
22. Describe the components of energy expenditure and the energy balance equation
23. Identify Energy expenditure for different physical activities and describe how to estimate energy requirements based on physical activity levels and other relevant factors
24. Determine clients' daily energy requirements
25. Describe the role of carbohydrate, fat and protein as fuels for aerobic and anaerobic energy production
26. Describe briefly the role of the body's energy systems in the storage and utilisation of energy substrates for energy production.

Energy substrates including:

- lipids
- carbohydrate
- protein
- alcohol

Energy systems including:

- alactic
- lactic
- aerobic

## Unit 7 (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 15 hours.**

### Knowledge to be covered

#### Screen/assess clients

1. 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
2. Demonstrate appropriate methods and protocols for collecting general information about eating habits from clients
3. Screen/assess clients to obtain the following:
  - relevant body composition measures which may include:
    - weight
    - height
    - waist circumference
    - hip circumference
    - skinfolds
    - waist to hip ratio
    - body mass indices



4.	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
5.	Evaluate the information collected in the fitness appraisal of clients about current body composition using relevant body composition measures
6.	Identify basic dietary assessment methods
7.	Analyse collected information including nutritional needs and preferences in relation to the clients' current status and nutritional goals which could include: <ul style="list-style-type: none"> <li>• healthy eating</li> <li>• weight management</li> <li>• improved fitness</li> <li>• improved self-image</li> <li>• Improved health</li> <li>• fat loss</li> <li>• muscle gain</li> </ul>
8.	Identify the barriers which may prevent clients achieving their nutritional goals
9.	Identify how to apply basic motivational strategies to encourage healthy eating and prevent non-compliance or relapse
10.	Describe the Principles of balanced nutrition to include: <ul style="list-style-type: none"> <li>• energy balance</li> <li>• recommended daily intake of nutrients</li> <li>• fuel for exercise</li> <li>• fuel for minimising post-exercise fatigue and maximising recovery</li> <li>• hydration levels</li> <li>• food groups</li> <li>• dietary guidelines</li> <li>• essential nutrients</li> <li>• food labelling and preparation</li> </ul>
11.	Describe the nutritional requirements and hydration needs of clients engaged in physical activity
12.	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
13.	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
14.	Identify the circumstances in which a client should be recommended to visit their doctor about the possibility of referral to a Registered Dietician
15.	Describe the need for reappraisal of clients' body composition and other relevant health parameters at agreed stages of the programme
16.	Follow legal and ethical requirements for the security and confidentiality of client information
<b>Plan how to apply the principles of nutrition and weight management to an exercise programme</b>	
17.	Agree with clients short, medium and long-term nutritional goals appropriate to their needs
18.	Access and make use of credible sources of information and advice in establishing nutritional goals with clients
19.	Ensure that the nutritional goals support and integrate with other programme components

20.	Identify potential barriers to clients achieving goals and identify and agree strategies to prevent non-compliance or relapse
21.	Record information about clients and their nutritional goals in an approved format
22.	Identify when clients need referral to another professional such as a medical professional or qualified nutritionist
23.	Identify and agree review points
<b>Apply the principles of nutrition and weight management to an exercise programme</b>	
24.	Monitor, evaluate and review the clients' progress towards their nutrition and weight management goals
25.	Apply body-composition management guidelines to develop an exercise plan relevant to the clients' goals and fitness levels
26.	Utilise the principles of balanced nutrition to provide healthy eating advice for clients
27.	Outline healthy eating options and hydration requirements for the exercise plan to clients
28.	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
29.	Discuss and confirm the exercise plan and healthy eating advice with clients
30.	Apply principles of motivation and behaviour modification to encourage exercise and healthy eating adherence
<b>Modify and review nutrition and weight management strategies</b>	
31.	Determine the appropriate exercise modifications or changes to healthy eating advice in conjunction with relevant medical or allied health professionals
32.	Communicate proposed changes to the exercise plan or healthy eating advice and reason for any change to clients
33.	Reappraise clients' body composition at agreed stages of the program
34.	Review client short and long-term goals and exercise plan

## Unit 8 (G1) Promote health and safety in a fitness environment

This section covers the following knowledge, which must be delivered and assessed in full:

- Maintain a health and safety exercise environment
- Controlling risks
- Know how to address safety issues within the limits of own role and responsibility
- Respond to emergency situations

**The Guided Learning Hours (GLH) required to deliver and assess this unit is 15 hours.**

### Knowledge to be covered

#### Maintain a health and safety exercise environment

1. Describe relevant up to date legal and regulatory health and safety information, safety requirements and procedures for all equipment, facilities, areas and tasks, to include:
  - manufacturers' guidelines and instructions for the use of facilities and equipment
  - documents relating to health and safety that may have to be completed and how to complete them correctly
  - identify legislative rights and responsibilities for workplace health and safety

2.	Describe how to address safety issues within the limits of own role and responsibility
3.	Describe relevant health and safety policies and procedures which may include: <ul style="list-style-type: none"> <li>• chemical handling</li> <li>• duty of care</li> <li>• emergency procedure</li> <li>• first aid</li> <li>• general maintenance</li> <li>• hazard identification</li> <li>• health and hygiene</li> <li>• issue resolution</li> <li>• manual handling</li> <li>• occupational health and safety</li> <li>• personal safety</li> <li>• reporting procedures</li> <li>• security</li> <li>• stress management</li> <li>• use of personal protective equipment</li> <li>• waste disposal</li> </ul>
4.	Be able to assess health and safety requirements in an exercise environment which may include: <ul style="list-style-type: none"> <li>• environmental conditions</li> <li>• slippery surfaces</li> <li>• manual handling and lifting</li> <li>• toxic substances</li> <li>• industrial gases</li> <li>• body fluids</li> <li>• fire</li> <li>• infectious waste</li> <li>• sharps</li> <li>• chemical spills</li> <li>• dust and vapours</li> <li>• noise, light and energy sources</li> <li>• faulty electrical equipment</li> <li>• faulty sport or activity-specific equipment</li> <li>• vehicles</li> </ul>
<b>Controlling risks</b>	
5.	Describe how to, identify, control and minimise hazards in the exercise environment, to include: <ul style="list-style-type: none"> <li>• A definition of hazards and how they can be identified, isolated, eliminated or minimised</li> <li>• how to identify and deal safely with hazards</li> <li>• how to report accidents, incidents, hazards and unsafe work practices and pass on suggestions for improving health and safety to relevant colleagues.</li> <li>• the types of accidents, injuries and illnesses that may occur in the activity environment</li> </ul>
<b>Respond to emergency situations</b>	
6.	Be able to respond to an emergency situation to include: <ul style="list-style-type: none"> <li>• be able to deal with injuries and signs of illness before qualified assistance arrives.</li> <li>• call for assistance if required ie qualified first aider or the emergency services</li> </ul>

	<ul style="list-style-type: none"> <li>• know the reporting procedures for emergencies and the emergency procedures</li> <li>• know the roles that different staff and external services play during an emergency</li> </ul>
7.	Describe first aid equipment requirements to ensure they meet health and safety guidelines and is present and functional

## Unit 9 (H1) Provide customer service in health and fitness

This section covers the following knowledge, which must be delivered and assessed in full:

- Maintain standards for personal presentation
- Communicate effectively with clients
- Provide customer with effective service
- Respond effectively to client complaints

**The Guided Learning Hours (GLH) required to deliver and assess this unit is 10 hours.**

### Knowledge to be covered

#### Maintain personal presentation

1. Describe how to maintain standards for personal presentation that apply to the fitness industry and understand the importance of presenting themselves in a positive manner.

#### Communicate effectively with clients

2. Communicate effectively with clients to include the following:
  - in a polite, professional and friendly manner
  - using appropriate language and tone in written and spoken and non-verbal communication
  - develop a rapport with and provide empathy with clients
  - provide information clearly to clients
  - using appropriate nonverbal communication skills
  - be able to listen to clients and ask questions to check understanding
  - be able to respond to a range of clients and show sensitivity to cultural and social differences
  - understand the importance of valuing equality and diversity when working with clients

#### Provide customer service to clients

3. Provide customer with effective service to include:
  - greet clients effectively
  - customer service techniques to meet client requirements and requests
  - be able to identify client needs and expectations correctly
  - be able to provide correct information and advice on appropriate products and services to the customer
  - ensure client satisfaction
  - form an effective working relationship with clients, know legal and ethical issues relating to client relations
  - meet all reasonable client needs and requests
  - identify and take all opportunities to enhance service quality
  - engage with clients during exercise session
  - how to link customer service to client motivation and adherence
  - recognise client dissatisfaction promptly and take action to resolve the situation
  - how to provide on-going customer service to clients
  - understand the importance of client care both for the client and the organisation

	<ul style="list-style-type: none"> <li>the importance of customer service to the development of the active industry and reaching out to non- traditional clients</li> </ul>
4.	Provide alternative customer service solutions if necessary and consult with a colleague or other professional where there is difficulty in meeting customer needs and expectations, consider the types of issues which may need to be referred to a colleague or other professional.
<b>Respond effectively to client complaints</b>	
5.	Describe how to respond effectively to client complaints including: <ul style="list-style-type: none"> <li>how to recognise client dissatisfaction</li> <li>be positive, sensitive and polite and in responding to the client complaint</li> <li>maintain a positive and cooperative manner at all times</li> <li>the importance of explaining any delay in dealing with clients and how to do so effectively</li> <li>complaint handling policies and procedures that generally operate within the fitness industry</li> </ul>

## Unit 10 (I1) Develop professional practice and personal career in the health and fitness industry

This section covers the following knowledge, which must be delivered and assessed in full:

- Reflect on professional practice
- Improve own development and career opportunities
- The fitness industry

**The Guided Learning Hours (GLH) required to deliver and assess this unit is 10 hours**

### Knowledge to be covered

#### Reflect on professional practice

- Reflect on professional practice, considering the following:
  - how to identify areas where further development of professional practice is needed
  - how to review the outcomes of working with clients, their feedback and feedback from colleagues, peers or managers
  - the importance of discussing ideas with other professionals and take account of their views
  - identify how effective the instructor is in managing clients' activity, including their health, safety and welfare
  - how to identify key lessons and how to make use of these in the future practice to improve planning and instructing
  - consider how to monitor the effectiveness of their instruction or programmes
  - consider how to monitor effective and motivational relationships with clients have been
  - consider how to monitor how well instructing styles matched clients' needs
- Understand the importance of reflection and continuing professional development in helping to develop client health, fitness and motivation

#### Improve own development and career opportunities

- Identify to improve own development and career opportunities
  - understand how to access information and keep up-to-date with developments in the active industry
  - consider career goals
  - how to develop a personal action plan to help to improve professional practice and career

<p>advancement</p> <ul style="list-style-type: none"> <li>• take part in relevant development activities</li> <li>• the importance of regularly reviewing and updating personal action plan</li> <li>• consider a range of ways in which you can improve own professional practice</li> </ul>
<b>The fitness industry</b>
4. The structure of the fitness industry and an organisations typical structure, and the role of the fitness professional in the industry
5. How to register with professional bodies and how to find opportunities for continuing professional development (CPD)
6. Relevant code of conduct or code of ethical practice and how to evaluate against it
7. Consider a range of employment opportunities in different sectors of the industry

### Unit 11 (B3 and (C1) Plan exercise training programmes

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

- Collect information about clients
- Plan personal training programmes
- Plan components of a personal training programme
- Present and agree personal training programmes with clients

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

#### Knowledge to be covered

##### Collect information about clients

1. Agree with clients their needs and readiness to participate
2. Know how to show empathy and be sensitive to client's goals and current stage of readiness.
3. Recognise any cultural barriers to exercise and personal training sessions
4. Explain the personal trainer role and responsibilities to clients

##### Plan personal training programmes

5. Describe how to access and use credible sources of guidelines on programme design and safe exercise
6. Describe how to identify and research accepted good practice in designing personal training programmes.
7. Plan specific outcome measures, stages of achievement and exercises/physical activities that are appropriate to clients' goals and level of fitness
8. Make sure exercises/physical activities are consistent with accepted good practice
9. Plan and agree a progressive timetable of sessions with clients
10. Explain and agree the demands of the programme with clients
11. When planning consider typical preferences, needs and expectations of clients to include:
  - cultural considerations
  - fitness goals
  - perceived benefits
  - cost
  - time availability

12.	When planning consider the needs of a range of clients to include: <ul style="list-style-type: none"> <li>• experienced</li> <li>• inexperienced</li> <li>• active</li> <li>• inactive</li> </ul>
13.	Apply the principles and variables of fitness to a gym programme, to meet client goals or to achieve general fitness and health gains <sup>[11]</sup> <sub>[SEP]</sub>
14.	Plan a range of exercises to help clients achieve their objectives and goals, covering: <ul style="list-style-type: none"> <li>• cardiovascular fitness</li> <li>• muscular fitness</li> <li>• flexibility</li> <li>• motor skills</li> <li>• core stability</li> </ul>
15.	Ensure effective integration of all programme exercises/ physical activities and sessions
16.	Identify the resources needed for the programme, including the use of environments not designed for exercise
17.	Select and add to the plan, equipment and exercises that are appropriate to the client's needs
18.	Know how to plan to using a range of equipment to include cardiovascular machines, resistance machines, free weights and other small equipment
19.	Plan using a range of fitness equipment to include: <ul style="list-style-type: none"> <li>• exercise balls</li> <li>• bars</li> <li>• steps</li> <li>• bands</li> <li>• abdominal assisters</li> <li>• plyometric training systems</li> <li>• pin loaded</li> <li>• cardiovascular</li> <li>• free weight</li> <li>• hydraulic</li> <li>• electronic and air-braked equipment</li> </ul>
20.	Plan realistic timings and sequences for exercise to include: <ul style="list-style-type: none"> <li>• Duration of equipment</li> <li>• Reps and Sets and Rest time</li> <li>• Methods of training/sequences such as basic sets, drop sets, pyramids</li> </ul>
21.	Consider the effects of different exercise components on the major body systems to enable safe and appropriate exercise planning.
22.	Record programme plans in an appropriate format that will help to implement the programme
23.	Use clear and structured forms when writing exercise plans and exercise programmes
24.	Provide alternatives to the programmed exercises/physical activities if clients cannot take part as planned
25.	Know a range of exercises and exercise programmes to enable selection and implementation of appropriate programmes to improve or maintain the fitness of clients.
26.	Apply the principles and variables of fitness to a range of activities which will achieve health and fitness benefits and the clients' goals. (short, medium and long-term goals)

27.	Consider methods of monitoring exercise intensity you plan to use
28.	Identify the need for support personnel within the programme
<b>Plan components of personal training programmes</b>	
29.	Plan a resistance programme that matches a client's documented: <ul style="list-style-type: none"> <li>• exercise goals and preferences,</li> <li>• current strength status and movement capabilities,</li> <li>• injury profile,</li> <li>• exercise risk factors</li> <li>• possible barriers</li> </ul>
30.	Plan a cardiovascular programme that matches a client's documented: <ul style="list-style-type: none"> <li>• exercise goals and preferences</li> <li>• current cardiovascular fitness</li> <li>• injury profile</li> <li>• exercise risk factors</li> <li>• possible barriers</li> </ul>
31.	Describe the physiological adaptations that take place as a result of taking part in exercise programme
32.	Outline the various types of conditioning appropriate to client goals and fitness levels
33.	Identify how to work in environments that are not specifically designed for exercise/physical activity such as: <ul style="list-style-type: none"> <li>• parks</li> <li>• out door spaces</li> <li>• indoor play and trampoline centres</li> <li>• community halls</li> </ul>
34.	Describe the range of resources you need to prepare for the personal training session, this could include the following: <ul style="list-style-type: none"> <li>• environment for the session</li> <li>• portable equipment</li> <li>• fixed equipment</li> </ul>
<b>Present and agree personal training programmes with clients</b>	
35.	Present an exercise programme to a client and gain endorsement and commitment to the programme and planned client tasks
36.	Ensure the client's overall objective/goal is allocated to a date that is achievable and challenging, and is agreed to by the client
37.	Describe the physiological changes and anatomical changes that occur with regular participation in the specific programme to clients
38.	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
39.	Demonstrate an awareness of clients' needs, objectives and exercise likes and dislikes when writing exercise plans
40.	Design an exercise plan format and structure that is appropriate to the client and the specific target adaptation
41.	Use the programming principles of planning for specific fitness adaptations when writing fitness exercise plans
42.	Describe how to develop the exercise programme, this may include: <ul style="list-style-type: none"> <li>• details relating to the anticipated rate of client adaptation</li> </ul>



- 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 12 (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 15 hours.**

### Knowledge to be covered

#### Apply knowledge of biomechanics to programme design

1. Describe the forces which act on the body during exercise
2. Analyse and apply the forces acting on the body during exercise and basic mechanical concepts to exercise
3. List the common biomechanical terms used to qualify the basic principles of biomechanics
4. Use the common biomechanical terms when instructing fitness activities
5. Describe the effects of lever systems in the body
6. Use the lever systems in the human body and their role in movement and stability to provide safe and effective exercises for clients
7. Use resistance equipment to alter the force required by muscles and affect joint stability when developing programs and instructing fitness activities
8. Describe the effect of changes in lever length on muscle force output in both anatomical and mechanical lever when instructing fitness activities
9. The structure and function of the stabilising ligaments and muscles of the spine
10. Describe the local muscle changes that can take place due to insufficient stabilisation
11. Describe the potential effects of poor posture on movement efficiency
12. Describe the potential problems that can occur as a result of postural deviations
13. Analyse the benefits, risks and applications of the following types of stretching:
  - static (passive and active)
  - dynamic
  - proprioceptive neuromuscular facilitation (PNF)
14. Different exercises that can improve posture

#### Apply knowledge of physiology to programme design

15. Describe the function and structure of the following:
  - the heart valves
  - coronary circulation

16.	Apply knowledge of the structure and function of the cardiovascular system to exercise
17.	Describe the short and long-term effects of exercise on blood pressure, including the Valsalva effect
18.	Describe the cardiovascular benefits and risks of endurance/aerobic training
19.	Identify the Blood pressure classifications and associated health risks
20.	Apply knowledge of the structure, processes and function of body energy systems involved in the storage, transport, and utilisation of energy
21.	Explain the contribution of energy according to: <ul style="list-style-type: none"> <li>• duration of exercise/activity being performed</li> <li>• type of exercise/activity being performed</li> <li>• intensity of exercise/activity being performed</li> </ul>
22.	Describe the by-products of the three energy systems and their significance in muscle fatigue
23.	The effect of endurance training/advanced training methods on the use of fuel for exercise
24.	Identify the cardiovascular and respiratory adaptations to endurance/ aerobic training
25.	Apply knowledge of the physiological responses of the human body to physical activity and exercise
26.	Apply knowledge of the physiological adaptations and weight bearing of the human body to regular exercise to exercise planning, programming and instruction to include: <ul style="list-style-type: none"> <li>• the effects of exercise on bones and joints including the significance of weight bearing exercise</li> </ul>
27.	Apply knowledge of the physiological responses to physical activity in various environmental conditions to exercise planning, programming and instruction
28.	Describe delayed onset of muscle soreness (DOMS), identify exercises or techniques likely to cause delayed onset of muscle soreness
29.	Identify the short and long-term effects of different types of exercise on muscle
30.	Analyse the benefits and limitations of different methods of monitoring exercise intensity including: the talk test, Rate of Perceived Exertion (RPE)
31.	Describe heart rate monitoring and the use of different heart rate zones
32.	Describe physiological responses to physical activity in various environmental conditions

### Unit 13 (B3) Instruct, supervise and deliver training sessions

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

- Preparing for the gym-based exercise
- Prepare the client for the planned session
- Instructing and supervise the gym-based programme
- Monitor client progress, review and adapt gym programmes

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

**Knowledge to be covered**

<b>Prepare the environment and equipment for personal training sessions</b>	
1.	<p>Prepare for the session to include:</p> <ul style="list-style-type: none"> <li>• prepare self for the session</li> <li>• obtain permission for use of public spaces if required</li> <li>• arrive on time</li> <li>• have relevant paperwork</li> <li>• prepare the environment for the planned session</li> <li>• identify, obtain and prepare the resources and equipment needed for planned exercises, improvising safely where necessary</li> <li>• ensure appropriate equipment is in place</li> <li>• follow manufacturers' equipment specifications for use, care and checking of equipment</li> <li>• evaluate the exercise environment for suitability for exercise and to ensure client safety</li> <li>• complete a risk assessment relevant to exercise in the gym</li> <li>• consider the health and environmental factors which can influence safety and the factors which effect group/individual working space</li> </ul>
<b>Prepare the client for the planned session</b>	
2.	<p>Prepare the client for the planned session to include:</p> <ul style="list-style-type: none"> <li>• make client feel welcome, relaxed and at ease in the exercise environment</li> <li>• explain the planned objectives and exercises to clients and how they meet client goals</li> <li>• describe planned exercises to the client, including their physical and technical demands and the benefits of gym-based exercises</li> <li>• assess clients' state of readiness and motivation to take part in the planned exercises</li> <li>• ensure client is aware of health and safety procedures including what to do in an emergency</li> <li>• negotiate and agree with clients any changes to the planned exercises that meet their goals and preferences and enable them to maintain progress</li> <li>• explain the purpose and value of a warm-up and cool down to clients</li> </ul>
<b>Demonstrate exercises and use of equipment</b>	
3.	Determine client's prior knowledge and skill in the exercise
4.	Demonstrate the correct and safe performance of exercises to the client using appropriate anatomical terminology as required
5.	Demonstrate safe and appropriate use of fitness equipment including cardio-vascular equipment, free weights and innovative exercise equipment
<b>Instruct, supervise and adapt planned exercises</b>	
6.	Teach an effective warm up and cool down activities according to the type and intensity of physical exercise and client needs and condition
7.	Show you have the knowledge to use a range of equipment to achieve the clients' goals
8.	Relate knowledge of the cardiovascular system to movement and instruction to make suitable adjustments for the client's needs.
9.	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
10.	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
11.	Know how to adjust incorrect or unsafe exercise using suitable techniques and at appropriate points in the session, (be mindful of hands on correction)

12.	Ensure safe and effective alignment for a range of gym-based exercise positions to cover use of: <ul style="list-style-type: none"> <li>• cardio-vascular machines (Bikes, treadmills, Elliptical trainers, stepper, rowing machine)</li> <li>• resistance machines</li> <li>• free-weights to include: bars, dumbbells, collars, Barbells, benches</li> <li>• body weight exercises</li> <li>• portable exercise equipment to include: Exercise balls, bars, steps, bands</li> </ul>
13.	Provide clear instructions, explanations and demonstrations that are technically correct, safe and effective (resistance – machines, free weights and body weight, cardiovascular, flexibility) to clients and explain their purpose and expected results.
14.	Use a range of methods to instruct to meet the client's preferred learning style
15.	Communicate effectively with the client, adapting your communication style to meet the client's needs, ensure your communication style is able to: <ul style="list-style-type: none"> <li>• establish rapport with client</li> <li>• give instructions that are clear to the client</li> <li>• adjust volume and pitch for the environment</li> <li>• motivational, especially when clients are finding exercises difficult</li> </ul>
16.	Ensure your voice is suitable for the gym environment
17.	Show knowledge of how to break exercise/movements down to their component parts for example teaching the deadlift or squat component first.
18.	Use suitable anatomical terminology when instructing the client
19.	Apply the limiting factors of the body's energy systems to the setting of exercise intensities as required
20.	Advise clients of safety considerations for gym-based exercise equipment
21.	Encourage feedback from clients to confirm their understanding of the exercises and to identify any difficulties
22.	Ensure suitable instructing position to be able to observe the client fully from a range of angles, be able to observe signs and symptoms of poor adaptation to training and overtraining adapt instructing position to be able to fully observe client
23.	Apply spotting techniques to ensure safety and enhance performance
24.	Provide feedback and instructing points which are timely, clear and motivational
25.	Analyse client's performance during the session, provide positive reinforcement
26.	Use suitable motivational techniques to provide on-going motivation and support to clients to encourage adherence and increase performance
27.	Recommend and implement steps that improve exercise adherence for clients
28.	Keep appropriate records of personal training sessions in relation to the overall programme
29.	Use music appropriately if relevant to the session type and session objectives
30.	Ensure clients can carry out the exercises safely on their own
<b>Bring exercise sessions to an end</b>	
31.	Allow sufficient time for the closing phase of the session
32.	Provide clients with feedback and positive reinforcement
33.	Encourage clients to think about the session and provide feedback

34.	Explain to clients how their progress links to their goals and the overall programme
35.	Leave the environment in a condition suitable for future use
<b>Monitor client progress, review and adapt gym programmes</b>	
36.	Explain why clients need to see their progress against objectives in terms of their overall goals and programme
37.	Know different methods of adapting gym programmes to ensure appropriate progression and/or regression according to client needs
38.	Based on the analyse of the client's performance give suitable adaptations, progress or regress exercises according to clients' needs, to include: <ul style="list-style-type: none"> <li>• level, speed, range of motion, rate, repetitions, weight, sets, rest, lever length</li> </ul>
39.	Explain why it is important to monitor individual progress especially if more than one client is involved in the session
40.	Complete a review of the client's progress to include: <ul style="list-style-type: none"> <li>• review the outcomes of working with clients and effectively collect client feedback</li> <li>• identify when a review of clients' exercise programme is necessary</li> <li>• reassess clients' fitness levels to determine the effectiveness of their current exercise programme</li> <li>• re-establish clients' specific fitness goals</li> <li>• provide positive and constructive feedback to clients on their progress and any recommended changes</li> <li>• provide motivational techniques to support client adherence to the fitness programme</li> <li>• modify clients' exercise programmes according to results of fitness reassessments and any changing requirements</li> </ul>
41.	Identify how to improve personal practice: <ul style="list-style-type: none"> <li>• how well the sessions met clients' goals,</li> <li>• how effective and motivational the relationship with the client was</li> <li>• how well the instructing styles matched the clients' needs</li> </ul>

## GYM EXERCISE – EQUIPMENT AND TRAINING SPECIFICATION

### To be used in planning and instructing

#### Cardiovascular training

Cardiovascular equipment used in designing gym programmes may include:

- upright cycle
- recumbent cycle
- treadmill
- stepper
- rowing machine
- elliptical trainer
- cross trainer

Cardiovascular training specifications used in gym programmes may include:

- exercises
- equipment
- intensity
- duration
- frequency
- heart-rate training zones

<p>Cardiovascular approaches to training:</p> <ul style="list-style-type: none"> <li>• interval</li> <li>• fartlek</li> <li>• continuous</li> </ul>
<p><b>Resistance training</b></p>
<p>Resistance training equipment used in designing gym programmes may include</p> <ul style="list-style-type: none"> <li>• machines</li> <li>• free weights (bars, dumbbells, collars, straps, barbells, benches)</li> <li>• bodyweight</li> <li>• benches</li> <li>• racks</li> <li>• exercise balls</li> <li>• elastic resistance</li> <li>• proprioception and stability training devices</li> </ul>
<p><b>Correct lifting and passing techniques, including dead lifting the barbell safely from the floor and spotting</b></p>
<p><b>Resistance approaches to training:</b></p> <ul style="list-style-type: none"> <li>• Pyramid systems</li> <li>• super-setting</li> <li>• giant sets</li> <li>• tri-sets</li> <li>• forced repetitions</li> <li>• pre-/post-exhaust</li> <li>• negative / eccentric training</li> <li>• muscular strength, endurance / muscular fitness</li> </ul>
<p>Resistance training specifications used in gym programmes may include:</p> <ul style="list-style-type: none"> <li>• exercises</li> <li>• equipment</li> <li>• repetitions</li> <li>• sets</li> <li>• resistance</li> <li>• intensity</li> <li>• frequency</li> <li>• variations</li> </ul>
<p>Resistance exercises may include:</p> <ul style="list-style-type: none"> <li>• bench and chest press</li> <li>• flye</li> <li>• cable crossover</li> <li>• shoulder press</li> <li>• lateral and front-arm raise</li> <li>• shrug</li> <li>• upright row</li> <li>• shoulder internal and external rotation</li> <li>• biceps, preacher and hammer curl</li> <li>• overhead triceps press</li> <li>• lying triceps extensions and press</li> <li>• triceps kickback</li> </ul>

- bent over and one-arm row
- supported and t-bar row
- pullover
- wrist curl
- bent over lateral raises and reverse flye
- squat
- lunge
- deadlift – bent and stiff leg
- calf raise
- hip abduction and adduction
- leg curl
- leg extension and leg press
- hack squat
- back and hip extension (glute-ham raise)
- abdominal, including oblique and reverse, crunch, abdominal isometric hold
- basic core stability and proprioceptive exercises
- lat pull-downs
- seated row

#### Flexibility training

Flexibility training specifications may include:

- target muscles
- range of motion
- duration
- type of stretch
  - static
  - dynamic
  - proprioceptive neuromuscular facilitation (PNF)

### Unit 14 (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 15 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

<b>Monitor and review on-going progress with clients</b>	
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
<b>Adapt personal training programmes with clients</b>	
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
<b>Work with clients to evaluate personal training programmes</b>	
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
<b>Identify lessons for future practice</b>	
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: <ul style="list-style-type: none"> <li>• Information gathering</li> <li>• Planning</li> <li>• Selection and structure of activities</li> <li>• Programme management</li> <li>• Programme monitoring</li> <li>• Programme adaptation and progression</li> <li>• Client relationship</li> <li>• Client motivation and adherence</li> <li>• Client satisfaction</li> </ul>