

# YMCA Level 3 Awards, Certificates, and Diplomas in Instructing Pilates and Reformer

### **Qualification Specification**



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# YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)

Operational start date: 01/08/2024

YMCA Level 3 Certificate in Instructing Pilates Studio

Reformer: Groups (610/6206/6)

Operational start date: 01/10/25

YMCA Level 3 Certificate in Instructing Pilates Studio

Reformer: One-to-One (610/4951/7)

Operational start date: 01/08/2024

YMCA Level 3 Certificate in Instructing Pilates Studio

Reformer: Groups and One-to-One (610/4342/4)

Operational start date: 01/08/2024

YMCA Level 3 Diploma in Instructing Pilates Studio Reformer:

Groups, One-to-One and Advanced Repertoire (610/4343/6)

Operational start date: 01/08/2024

YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)

Operational start date: 01/08/2024

**Qualification Specification** 

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### Introduction

YMCA Awards is part of Central YMCA – the world's first YMCA – a national charity that has been helping people make positive changes in their lives since 1844.

We are experts in education, health, and wellbeing with over 25 years of experience developing UK regulated and globally recognised qualifications.

We work closely with industry experts, employers, and training providers to make sure that our products and services deliver life-changing opportunities. With over half a million qualifications awarded, 300,000 people have advanced their careers with YMCA Awards.

### Aim

#### YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)

By completing this qualification, learners will meet industry requirements to become a Pilates matwork Instructor, as set out within the CIMSPA professional standard.

The purpose of this qualification is to enable learners to plan, deliver, and evaluate Pilates matwork sessions and programmes. This may include:

- · Group Pilates matwork sessions.
- One-to-one Pilates matwork sessions and programmes.
- Pilates matwork sessions using small equipment to modify exercises, such as bands, balls, and bricks.

# YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)

By completing this qualification, learners will meet industry requirements to:

Plan, deliver, and evaluate Pilates-based reformer sessions for groups (6+).

#### YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)

By completing this qualification, learners will meet industry requirements to:

• Plan, deliver, and evaluate one-to-one Pilates reformer sessions and programmes

# YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)

By completing this qualification, learners will meet industry requirements to:

- Plan, deliver, and evaluate Pilates reformer sessions and programmes, including:
  - Pilates-based group reformer sessions (6+).
  - One-to-one Pilates reformer sessions and programmes.

# YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6)

By completing this qualification, learners will meet industry requirements to:

- Plan, deliver and evaluate Pilates reformer sessions and programmes, including:
  - Pilates-based group reformer sessions (6+).
  - One-to-one Pilates reformer sessions and programmes.
  - Instruct exercises from the advanced repertoire.

# YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)

By completing this qualification, learners will meet industry requirements to:

Plan, deliver, and evaluate exercises from the advanced reformer repertoire

# Progression opportunities

The YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0) is an occupational entry qualification. This means it meets the agreed industry prerequisites to enter the sport and physical activity sector as an employed or self-employed Pilates matwork instructor.

The following qualifications are all technical specialisms which are designed to support existing level 3 Pilates matwork instructors in expanding their scope of practice:

- YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)
- YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7).
- YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4).
- YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6).
- YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8).

These qualifications can also lead to further training at other levels to specialise and increase scope of practice. For example:

- Occupational qualifications (to deliver other types of exercise):
  - YMCA Level 2 Certificate in Exercise and Fitness: Group Exercise Instructor (610/2791/1).
  - YMCA Level 2 Diploma in Exercise and Fitness: Gym Instructor (610/2784/4).
  - YMCA Level 3 Diploma in Exercise and Fitness: Gym Instructor and Personal Trainer (610/2789/3).
- **Population specialisms** (to work with a broader range of clients):
  - YMCA Level 3 Award in Supporting Participation in Physical Activity: Perinatal (610/0829/1).
  - YMCA Level 3 Award in Supporting Participation in Physical Activity: Disability and Impairments (610/1559/3).
  - YMCA Level 3 Award in Supporting Participation in Physical Activity: Older Adults (610/1668/8).
  - YMCA Level 3 Certificate in Supporting Participation in Physical Activity: Long-Term Health Conditions (610/4227/4).
- Environment specialisms (to work in more settings):
  - YMCA Level 2 Award in Developing Sustainable Physical Activity Programmes Within Community Settings (603/7343/X).
  - YMCA Level 3 Award in Delivering Physical Activity in Different Environments: Outdoors (610/4041/1).

- **Technical specialisms** (to work with specific equipment or perform additional roles within the workplace):
  - YMCA Level 2 Award in Mental Health Awareness and Understanding Approaches to Support Individuals (603/7146/8).
  - o YMCA Level 2 Award in Safeguarding Adults and Adults at Risk (610/0822/9).
  - YMCA Level 3 Award in Emergency First Aid at Work (603/1902/1).
  - o YMCA Level 3 Award in First Aid at Work (603/1903/3).

# Stakeholder engagement

These qualifications have been mapped to recognised professional standards

Qualification	Professional standards
YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)	CIMSPA Pilates-based matwork instructor.
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)	EMD UK scope of practices (Pilates- based and Pilates method) created in
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)	conjunction with the 'Society for the Pilates method.'
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)	
YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6)	
YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)	

# Entry requirements, prerequisites, and availability

#### YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)

This qualification has been designed for learners who are aged 16 years and older.

Before starting this qualification, it is recommended that learners:

Have experience of participating in Pilates matwork sessions.

# YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)

This qualification has been designed for learners who:

- Are 16+ years old.
- Are able to communicate effectively with individuals and groups.
- Hold an appropriate Level 3 Pilates matwork qualification.

It is recommended that learners have at least six months experience planning and delivering Pilates matwork sessions before taking this qualification.

#### YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)

This qualification has been designed for learners who:

- Are 16+ years old.
- Are able to communicate effectively with individuals and groups.
- Hold an appropriate Level 3 Pilates matwork qualification.

It is recommended that learners have at least six months experience planning and delivering Pilates matwork sessions before taking this qualification.

# YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)

This qualification has been designed for learners who:

- Are 16+ years old.
- Are able to communicate effectively with individuals and groups.
- Hold an appropriate Level 3 Pilates matwork qualification.

It is recommended that learners have at least six months experience planning and delivering Pilates matwork sessions before taking this qualification.

# YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6)

This qualification has been designed for learners who:

- Are 16+ years old.
- Are able to communicate effectively with individuals and groups.
- Hold an appropriate Level 3 Pilates matwork qualification.

It is recommended that learners have at least six months experience planning and delivering Pilates matwork sessions before taking this qualification.

# YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)

This qualification has been designed for learners who:

- Are 16+ years old.
- Are able to communicate effectively with individuals and groups.
- Hold an appropriate Level 3 Pilates matwork qualification.
- Hold an appropriate Level 3 Pilates studio reformer qualification to work with both groups and individuals.

It is recommended that learners have at least six-months experience planning and delivering Pilates matwork and reformer sessions before taking this qualification.

Learners can take these qualifications in:

Location	Regulated by
England	Ofqual
Wales	Qualifications Wales
Northern Ireland	CCEA Regulation
Other UK regions and outside of the UK	Ofqual

# Reasonable adjustments and special consideration

In making these qualifications available, YMCA Awards has made every attempt to make sure that there are no unnecessary barriers to achievement. You can find full details of our reasonable adjustment and special consideration policy on our website.



ymcaawards.co.uk/centres/policies-and-procedures

# Grading and structure

These qualifications are graded as either Pass or Refer.

A Pass grade demonstrates that a learner has been assessed as fully competent against all assessment criteria within the qualification.

A Refer grade indicates that a learner has been assessed as not yet competent against one or more of the assessment criteria of the unit and/or qualification. This is a failing grade, and learners will require reassessment to achieve the qualification.

To achieve a Pass, learners must achieve the components indicated below:

Qualification	Components required
YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)	Group A: one unit Group B: one unit Group C: two units Group D: all (two) units
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)	Group E: all (two) units
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)	Group E: one unit (History and fundamentals of the Pilates reformer M/651/2027) Group F: one unit
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)	Group E: all (two) units Group F: one unit
YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6)	Group E: all (two) units Group F: one unit Group G: one unit
YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)	Group G: one unit

#### **Group A: Anatomy and physiology**

Learners completing this group must achieve one of the following units:

UN	Unit title	Level	GLH	TQT
J/651/2033	Anatomy and physiology for Pilates and yoga professionals	3	73	117
H/650/4852	Anatomy and physiology for exercise and fitness professionals	3	78	134

Note: For assessment guidance and associated paperwork for Anatomy and physiology for exercise and fitness professionals (H/650/4852) please see YMCA Level 3 Diploma in Exercise and Fitness Learner Assessment Record.

#### **Group B: Customer experience**

Learners completing this group must achieve one of the following units:

UN	Unit title	Level	GLH	TQT
K/651/2034	Providing a positive customer experience to support a Pilates business	2	24	55
J/650/4853	Providing a positive customer experience to exercise and fitness participants	2	24	55

Note: For assessment guidance and associated paperwork for Providing a positive customer experience to exercise and fitness participants (J/650/4853) please see YMCA Level 2 Diplomas in Exercise and Fitness: Learner Assessment Record.

#### **Group C: Health awareness and lifestyle management**

Learners completing this group must achieve two units, one of the following units:

UN	Unit title	Level	GLH	TQT
L/651/2035	Health awareness and lifestyle management for Pilates professionals	2	19	47
R/650/4857	Health awareness and lifestyle management	2	25	60

Note: For assessment guidance and associated paperwork for Health awareness and lifestyle management (R/650/4857) please see YMCA Level 2 Diplomas in Exercise and Fitness: Learner Assessment Record.

And this additional unit:

UN	Unit title	Level	GLH	TQT
L/650/4855	Health screening, risk stratification and scope of practice	3	13	32

#### **Group D: Pilates matwork**

Learners completing this group must achieve the following two units:

UN	Unit title	Level	GLH	TQT
M/651/2036	The history, origins, and fundamentals of the Pilates method	3	25	86
R/651/2037	Plan, deliver and evaluate Pilates matwork sessions and programmes	3	52	106

### **Group E: Pilates Studio reformer (groups)**

Learners completing this group must achieve the following two units:

UN	Unit title	Level	GLH	TQT
M/651/2027	History and fundamentals of the Pilates reformer	3	41	97
R/651/2028	Plan, deliver and evaluate Pilates-based reformer sessions (Groups)	3	54	122

#### **Group F: Pilates studio reformer (one-to-one)**

Learners completing this group must achieve the following one unit:

UN	Unit title	Level	GLH	TQT
T/651/2029	Plan, deliver and evaluate Pilates reformer sessions and programmes (One-to-One)	3	54	122

**Please note:** Learners taking the YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7) must also achieve the History and fundamentals of the Pilates reformer (M/651/2027) from Group E.

#### **Group G: Pilates studio reformer (advanced repertoire)**

Learners completing this group must achieve the following one unit:

UN	Unit title	Level	GLH	TQT
D/651/2030	The advanced reformer repertoire	3	10	46

The guided learning hours (GLH) and total qualification time (TQT) for these qualifications are:

Qualification	GLH	TQT
YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)	206-217	443-473
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)	95	219
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)	95	219
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)	149	341
YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6)	159	387
YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)	10	46

Find out more about GLH and TQT on our website:



ymcaawards.co.uk/how-we-determine-the-level-and-size-of-our-qualifications/

# Using this document

The following pages provide the unit content for this qualification. Each unit includes learning outcomes, assessment criteria, and relevant content for delivery. These are set out below.

Learning outcome ('the learner will')				
Assessment criteria	Relevant content			
('the learner can')	(additional delivery guidance)			
What a learner is expected to know, understand, or be able to do following their learning.	Suggestions on the depth and breadth of content to cover.			

Please note: This qualification specification does not include content for the following units:

- Anatomy and physiology for exercise and fitness professionals (H/650/4852)
- Providing a positive customer experience to exercise and fitness participants (J/650/4853)
- Health awareness and lifestyle management (R/650/4857).

Content for these units can be found in the YMCA Level 2 and Level 3 Awards, Certificates, and Diplomas in exercise and fitness qualification specification.

#### Recognition of prior learning (RPL)

Recognition of prior learning (RPL) can be accepted for learners who hold existing qualifications containing the above or similar units that have been endorsed against the CIMSPA professional standards, national occupational standards, or European standards. For example:

- Register of Exercise Professionals (REPs) / SkillsActive.
- European Register of Exercise Professionals (EREPs) / EuropeActive.

Assessment may be required to check currency of knowledge for qualifications (and units) achieved over five years ago.

### Assessment overview

These qualifications are designed to be assessed in stages, with learners demonstrating the knowledge, skills, and behaviours outlined in one stage before proceeding to the next.

Qualification (QN)	1.1	1.2	1.3	1.4	2.1	3.1	4.1	4.2	4.3	5.1	6.1	7.1	7.2	7.3
YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0)	x x x x x x Not applicable (N/A)													
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)		Prerequisite		х	х	х	х		N/	'A				
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)	Prerequisite			х	х	х	N/A	х		N/A				
YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)	Prerequisite		х	х	х	х	х		N/A					
YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to- One and Advanced Repertoire (610/4343/6)	Prerequisite			х	х	x	х	х	х	x	x			
YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)	Prerequisite			х	х	х								

The table below provides details of the tasks within each assessment stage.

Assessment stage and task	Details	Unit(s) assessed
1.1. Questions and	Learners to need to answer questions designed to assess their knowledge of:	Anatomy and physiology
answers on anatomy and physiology for	Anatomical terminology	for Pilates and yoga
Pilates and yoga professionals	<ul> <li>Classification, structure, and function of the anatomical and physiological systems of the body:</li> </ul>	professionals (J/651/2033)
	o the skeletal system	
	o the muscular system	
	o the cardiovascular system	
	o the respiratory system	
	o the nervous system	
	o the endocrine system	
	o the energy systems.	
	Interrelationship between the anatomical and physiological systems.	
	Lifespan changes which affect the body system, health, and wellbeing	
	How physical activity, movement, and exercise affect the body systems.	
	This assessment is available digitally (auto-marked) through YMCA Awards' online system. Centres wishing to create their own questions or use their own platform must seek prior approval from YMCA Awards.	
	This assessment task will be authenticated and learner knowledge and understanding confirmed through other assessments in Assessment Stage 1:	
	Assessment 1.2	
	Assessment 1.4	

Assessment stage and task	Details	Unit(s) assessed
1.2 Presentation and	There are two parts to this assessment:	Anatomy and physiology
professional discussion	Part 1: Presentation to cover the 'history and benefits of Pilates and effects on the body systems and health'.	for Pilates and yoga professionals (J/651/2033)
	Part 2: Professional discussion.	AND
	<b>Part 1:</b> Presentation to cover the 'history and benefits of Pilates and effects on the body systems and health'.	Health awareness and
	Learners are required to plan and deliver a 10-minute presentation to cover the following:	lifestyle management for Pilates professionals (L/651/2035)
	The history of Pilates and the key people involved in developing the method.	AND
	A definition of health and factors that affect health.	The biotomy evision and
	The benefits of Pilates for health, mental wellbeing, and improvement of daily living.	The history, origins, and fundamentals of the Pilates method (M/651/2036)
	The interrelationship between the body systems.	
	The effects of lifespan changes to the body systems and how Pilates can support these changes.	
	The effects of Pilates on the body systems.	
	Part 2: Professional discussion.	
	Once the assessor has confirmed that the presentation has been completed to the required standard, learners will undertake a 20 minute ±10% professional discussion with their assessor.	
	The aim of the professional discussion is to authenticate learner work and confirm the learner's knowledge, understanding.	

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	The professional discussion will take place within two weeks of the presentation being signed off.  Learners may refer to their presentation notes during the professional discussion.	
	No other notes are permitted.	
	The assessor will ask one broad overarching question to start the professional	
	discussion and a maximum of six open-ended questions relating to the underpinning knowledge listed below.	
	Underpinning knowledge and understanding	
	During this assessment, learners will be assessed on their underpinning knowledge of the following subjects:	
	The history, origins, and fundamentals of the Pilates method:	
	o The history of Pilates and the key people involved in developing the method.	
	<ul> <li>The benefits of Pilates for health, mental wellbeing, and improvement of daily living.</li> </ul>	
	Applied anatomy and physiology for Pilates and yoga professionals:	
	o Cardiovascular system.	
	Respiratory system.	
	o Endocrine system.	
	o Energy systems.	
	o Interrelationship between the anatomical and physiological systems.	
	<ul> <li>Lifespan changes which affect the body system, health, and wellbeing</li> </ul>	
	<ul> <li>Effects of physical activity, movement and exercise on the body systems</li> </ul>	

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	Further information can be found in the YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0) learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 40 minutes per learner.	
1.3 Personal practice	<ul> <li>There are two parts to this assessment:</li> <li>Part 1: Practice log.</li> <li>Part 2: Recording of personal practice and evaluation.</li> <li>Part 1: Practice log</li> <li>Learners are required to maintain a log of their own personal practice for a minimum of 20 hours.</li> <li>Practice may include:</li> <li>Attendance and practice of any style and approach to the Pilates method.</li> <li>Attendance to group sessions.</li> </ul>	The history, origins, and fundamentals of the Pilates method (M/651/2036)
	<ul> <li>Attendance to one-to-one sessions.</li> <li>Home practice.</li> <li>Participation in online sessions and/or the use of DVDs.</li> <li>Part 2: Recording of personal practice and evaluation</li> <li>Learners are required to record 60 minutes of their personal practice (one full session or a series of shorter sessions) and evaluate their ability to perform the exercises practiced.</li> <li>The evaluation must outline:</li> <li>The physical or technical demands of the exercise, including aspects which they found challenging.</li> </ul>	

Assessment stage and task	<b>Details</b>	Unit(s) assessed
1.4 Exercise analysis worksheet and professional discussion	<ul> <li>Reasons for exclusion of any exercises (as required).</li> <li>Personal modifications and adaptations required to perform the exercises (as needed).</li> <li>Further information can be found in the YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0) learner assessment record (LAR).</li> <li>The estimated time required by an assessor to mark and provide feedback for this assessment is 30 minutes per learner.</li> <li>There are two parts to this assessment: <ul> <li>Part 1: Exercise analysis worksheet.</li> <li>Part 2: Professional discussion.</li> </ul> </li> <li>Task 1: Exercise analysis worksheet</li> <li>Learners are required to analyse the 34 original 'Contrology' matwork exercise repertoire and fully complete the exercise analysis worksheet template.</li> <li>This should cover: <ul> <li>The name of the exercise.</li> <li>The purpose and benefits.</li> </ul> </li> <li>The technical and physical challenges presented.</li> <li>The movement plane, joint action, prime movers and other stabiliser/fixator muscles.</li> <li>Contraindications.</li> <li>Modifications.</li> </ul>	The history, origins, and fundamentals of the Pilates method (M/651/2036)  AND  Anatomy and physiology for Pilates and yoga professionals (J/651/2033)

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	Task 2: Professional discussion	
	Once the assessor has confirmed that the exercise analysis worksheet has been completed to the required standard, learners will undertake a 20 minute ±10% professional discussion with their assessor.	
	The aim of the professional discussion is to authenticate learner work and confirm the learner's knowledge, understanding.	
	The professional discussion will take place within two weeks of the exercise analysis worksheet being signed off.	
	Learners may refer to their exercise analysis worksheet during the professional discussion. No other notes are permitted.	
	The assessor will ask one broad overarching question to start the professional discussion and a maximum of six open-ended questions relating to the underpinning knowledge listed below.	
	Underpinning knowledge and understanding	
	During this assessment, learners will be assessed on their underpinning knowledge of the following subjects:	
	History, origins and fundamentals of the Pilates method:	
	<ul> <li>The purpose, benefits, and contraindications of the 34 original mat exercises.</li> </ul>	
	<ul> <li>The main Pilates studio apparatus and how they support performance of the matwork system.</li> </ul>	
	<ul> <li>The principles and application of basic, preparatory exercises to prepare for Pilates matwork.</li> </ul>	

Assessment stage and task	Details	Unit(s) assessed
	<ul> <li>The six main principles of Pilates and how to apply these to each exercise or movement pattern in the matwork system.</li> </ul>	
	<ul> <li>How Pilates may improve posture and stabilisation.</li> </ul>	
	Applied Anatomy and physiology for Pilates and yoga professionals:	
	o anatomical terminology	
	o the skeletal system	
	o the muscular system	
	o the nervous system.	
	Further information can be found in the YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0) learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 45 minutes per learner.	

Assessment stage and task	Details	Unit(s) assessed
2.1 Plan, deliver, and evaluate a group Pilates-based matwork session (observed delivery) with professional discussion	There are two parts to this assessment.  Part 1: Plan, deliver and evaluate a group Pilates-based matwork session.  Part 2: Professional discussion.  Part 1: Plan, deliver, and evaluate a group Pilates-based matwork session.  Planning  Learners will be required to plan, deliver, and evaluate a group Pilates matwork session, incorporating relevant exercises from the Pilates matwork repertoire.  The session must:  Be planned for a duration of 60 minutes.  Be structured, to include:  Application of the Pilates principles in all phases.  Preparatory phase.  Main phase, to include:  A minimum of 10 exercises based on or derived from the 34 original Contrology matwork repertoire.  Exercises can be modifications and adaptations to accommodate group or individual needs. appropriate flow and sequence.  Closing phase, to include:  A minimum of four exercise start positions (prone, supine, side, seated, all fours, standing, kneeling) throughout the session.  Movement in all movement planes (frontal, sagittal, transverse) and a balanced approach.	Plan, deliver and evaluate Pilates matwork sessions and programmes sessions and programmes (R/651/2037)  AND  Providing a positive customer experience to support a Pilates business (K/651/2034)  AND  Health screening, risk stratification and scope of practice (L/650/4855)

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	Delivery	
	Learners are required to deliver the planned session.	
	This session must be assessed live (face-to-face or online), in a real exercise environment and with a minimum of six participants. Two participants must be real participants (not peers from the course).	
	The use of prerecorded video assessment is not permitted.	
	Evaluation	
	Following the delivery, learners will be given 30 minutes to complete a written evaluation of the session.	
	Task 2: Professional discussion	
	Once the assessor has confirmed that the planning records and observed practical session has been completed to the required standard, learners will undertake a 20 minute ±10% professional discussion with their assessor.	
	The aim of the professional discussion is to authenticate learner work and confirm the learner's knowledge and understanding.	
	The professional discussion will take place within two weeks of the planning records and observed practical session being signed off.	
	Learners may refer to their planning records during the professional discussion. No other notes are permitted.	
	The assessor will ask one broad overarching question to start the professional discussion and a maximum of six open-ended questions relating to the underpinning knowledge listed below.	

Assessment stage and task	Details	Unit(s) assessed
and the second s	Underpinning knowledge and understanding During this assessment, learners will be assessed on their underpinning knowledge of the following subjects:  Plan, deliver and evaluate Pilates-based matwork sessions and programmes (groups).  Health screening, risk stratification, and scope of practice.  The role of health screening.  Providing a positive customer experience.  Customer journey.  Health and safety.  Further information can be found in the YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0) learner assessment record (LAR).  The estimated time required by an assessor to mark and provide feedback for this assessment is 60 minutes per learner.	Unit(s) assessed

Assessment stage and task	Details	Unit(s) assessed
3.1 Bespoke client work project with professional discussion.	There are five parts to this assessment:  Task 1: Consultation and assessment.  Task 2: Design of a 10 session bespoke progressive programme.  Task 3: Implementation of the programme (a minimum of five sessions).  Task 4: Evaluation of the programme and business planning.  Task 5: Professional discussion.  Learners are required to complete these tasks and build a portfolio of real client work (one-to-one) to submit to their assessor prior to participation in a professional discussion.  Part 1: Consultation  Learners are required to consult with and gather health screening and assessment information from one 'real' client.  The consultation and assessment should last between 30 and 45 minutes.  All information gathered from the client should be recorded using the client consultation and assessment record.  The risk stratification of the client(s) must be within scope of practice.  Part 2: Planning  Learners are required to plan a 10 session progressive programme for the client, including a full session plan for the first delivered session with them.  The first session plan should be recorded using the session plan record. The progressive programme should be recorded using the progressive programme record.	Plan, deliver and evaluate Pilates matwork sessions and programmes sessions and programmes (R/651/2037)  AND  Providing a positive customer experience to support a Pilates business (K/651/2034)  AND  Health screening, risk stratification and scope of practice (L/650/4855)  AND  Health awareness and lifestyle management for Pilates professionals (L/651/2035)

Assessment stage and task	Details	Unit(s) assessed
	Part 3: Implementation and client feedback	
	Learners are required to implement a minimum of five sessions with the client.	
	The client needs to ideally participate in two sessions per week. This can be in person or online.	
	Implementation of the programme should be recorded using the 'Client feedback and instructor guidance' template.	
	Part 4: Self-evaluation and business planning	
	Learners are required to evaluate the full programme including consultation, programme design, implementation, and client feedback. They must also prepare plans for their future work as a Pilates Instructor.	
	The bespoke client work project and recorded client session must be submitted to the assessor in preparation for professional discussion. The assessor will provide feedback on the project within two weeks.	
	Professional discussion	
	Once the assessor has confirmed that the bespoke client work project has been completed to the required standard, learners will undertake a 20 minute ±10% professional discussion with their assessor.	
	The aim of the professional discussion is to authenticate learner work and confirm the learner's knowledge and understanding.	
	The professional discussion will take place within two weeks of the project being signed off.	
	Learners may refer to their bespoke client work project during the professional discussion. No other notes are permitted.	

Assessment stage and task	Details	Unit(s) assessed
	The assessor will ask one broad overarching question to start the professional discussion and a maximum of six open-ended questions relating to the underpinning knowledge listed below.	
	Underpinning knowledge and understanding	
	During this assessment, learners will be assessed on their underpinning knowledge of the following subjects:	
	Plan, deliver and evaluate Pilates-based matwork sessions and programmes (one-to-one).	
	Providing a positive customer experience:	
	Customer journey.	
	<ul> <li>Continuing professional development.</li> </ul>	
	<ul> <li>Business acumen and future business development.</li> </ul>	
	Health and lifestyle awareness:	
	<ul> <li>Nutrition and healthy eating.</li> </ul>	
	Health conditions.	
	o Behaviour change.	
	Health screening, risk stratification and scope of practice.	
	Further information can be found in the YMCA Level 3 Diploma in Instructing Pilates Matwork (610/4340/0) learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 60 minutes per learner.	

Assessment stage and task	<b>Details</b>	Unit(s) assessed
4.1 Presentation	<ul> <li>Learners are required to plan and deliver a 10-minute presentation to cover the following:</li> <li>The history of Pilates and the key people involved in developing the method.</li> <li>The 34 original Contrology mat exercises and their relationship to the reformer repertoire.</li> <li>The origins and history of the Pilates reformer.</li> <li>Other studio apparatus and their use within the Pilates system.</li> <li>The purpose and benefits of using the reformer, including effects on the body systems.</li> <li>The difference between classical and contemporary uses of the reformer</li> <li>The main design features of the reformer.</li> <li>An assessor must observe this presentation.</li> <li>The submission of prerecorded video evidence is permitted for this assessment.</li> <li>Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).</li> <li>The estimated time required by an assessor to mark and provide feedback for this assessment is 20 minutes per learner.</li> </ul>	History and fundamentals of the Pilates reformer (M/651/2027)
4.2 Personal practice and recording	<ul> <li>There are two parts to this assessment:</li> <li>Part 1: Practice log.</li> <li>Part 2: Recording of personal practice and evaluation.</li> </ul>	History and fundamentals of the Pilates reformer (M/651/2027)

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	Part 1: Practice log	
	Learners are required to maintain a log of their own personal practice for a minimum of <b>20 hours</b> .	
	Practice may include:	
	Attendance and practice of any style of Pilates reformer training.	
	Attendance to group reformer sessions.	
	Attendance to one-to-one reformer sessions.	
	Home practice using the reformer.	
	Participation in online reformer sessions and/or the use of DVDs.	
	Part 2: Recording of personal practice and evaluation	
	Learners are required to record 60 minutes of their personal practice (one full session or a series of shorter sessions) and evaluate their ability to perform the reformer exercises practiced.	
	An assessor must observe this personal practice.	
	The evaluation must outline:	
	The physical or technical demands of the reformer exercise, including aspects which they found challenging.	
	A rationale for exercise selection.	
	Reasons for exclusion or omission of any exercises (as required).	
	<ul> <li>Personal modifications and adaptations required to perform the exercises (as needed) and how this supports personal practice.</li> </ul>	
	Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).	

Assessment stage and task	Details	Unit(s) assessed
	The estimated time required by an assessor to mark and provide feedback for this assessment is 30 minutes per learner.	
4.3 Exercise analysis worksheet and professional discussion	There are two parts to this assessment:	History and fundamentals of the Pilates reformer (M/651/2027)
	Part 1: Exercise analysis worksheet.	
	Part 2: Professional discussion.	
	Task 1: Exercise analysis worksheet	
	Learners are required to analyse the 30 exercises from the foundation and intermediate reformer repertoire and fully complete the exercise analysis worksheet template.	
	The exercises selected should cover all aspects of the reformer repertoire e.g., footwork, rowing series, long box series etc., and all start positions, e.g. supine lying, prone lying, seated, kneeling, all fours, standing.	
	This should cover:	
	The name of the exercise.	
	The purpose and benefits.	
	The technical and physical challenges presented.	
	The movement plane, joint action, prime movers and other stabiliser/fixator muscles.	
	Contraindications.	
	Modifications.	

Assessment stage and task	Details	Unit(s) assessed
	Task 3: Professional discussion	
	Once the assessor has confirmed that the exercise analysis worksheet and other written tasks have been completed to the required standard, learners will undertake a 20 minute ±10% professional discussion with their assessor.	
	The aim of the professional discussion is to authenticate learner work and confirm the learner's knowledge and understanding.	
	The professional discussion will take place within two weeks of the exercise analysis worksheet and other assessment tasks being signed off.	
	Learners may refer to their exercise analysis worksheet, presentation notes, and personal practice evaluation during the professional discussion. No other notes are permitted.	
	The assessor will ask one broad overarching question to start the professional discussion and a maximum of six open-ended questions relating to the underpinning knowledge listed below.	
	Underpinning knowledge and understanding	
	During this assessment, learners will be assessed on their underpinning knowledge of the following subjects:	
	The full repertoire of exercises that can be practiced using the reformer.	
	<ul> <li>The similarities and differences between the reformer and matwork. repertoire and the 34 original 'Contrology' mat exercise.</li> </ul>	
	Appropriate set-up and maintenance of the reformer.	
	The correct set-up and execution of movement for all exercises in the foundation and intermediate reformer repertoire.	

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	The purpose, benefits, and contraindications of the foundation and intermediate reformer exercise repertoire.	
	<ul> <li>How to apply the Pilates principles to the foundation and intermediate reformer repertoire.</li> </ul>	
	Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 45 minutes per learner.	

Assessment stage and task	Details	Unit(s) assessed
5.1 Plan, deliver, and evaluate a group studio reformer session (observed delivery)	Learners are required to plan, deliver, and evaluate a group studio reformer session.  Planning  Learners will be required to plan two Pilates-based studio reformer sessions for a larger group of 6+ participants.  • The first session should be a foundation session for newcomers to the reformer.  • The second session should be planned for improvers.  Each session must:  • Be planned for a duration of 60 minutes.  • Be structured to include:  • Application of Pilates principles in all phases.  • A preparatory phase.  • A main phase, with a minimum of 10 exercises from the reformer repertoire appropriate to group needs:  - Exercises can be modifications and adaptations to accommodate group needs.  - Use of an appropriate flow and sequence.  • A closing phase.  • A minimum of four exercise start positions (prone, supine, side, seated, all fours, standing, kneeling) throughout the session.  • Movement in all movement planes (frontal, sagittal, transverse) and a balanced approach.	Plan, deliver and evaluate Pilates-based reformer sessions (Groups) (R/651/2028)

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	Delivery	
	Learners are required to deliver <b>one</b> of the planned sessions (assessor choice).	
	This session must be assessed live (face-to-face or online), in a real exercise environment and with a minimum of six participants. Two participants must be real participants (not peers from the course).	
	The use of prerecorded video assessment is not permitted.	
	Evaluation	
	Following the delivery, learners will be given 30 minutes to complete a written evaluation of the session.	
Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).		
	The estimated time required by an assessor to mark and provide feedback for this assessment is 60 minutes per learner.	
6.1 Bespoke client	There are five parts to Assessment 6:	Diam deliver and evaluate
work project, observed practical session with professional	Task 1: Consultation and assessment with a real client.	Plan, deliver and evaluate Pilates reformer sessions
	<ul> <li>Task 2: Planning of a 10 session progressive reformer programme for the client.</li> </ul>	and programmes (One-to- One) (T/651/2029)
discussion	Task 3: Implementation of the programme (eight sessions) and evaluation.	
	Task 4: Observed delivery and evaluation of one session (assessor choice).	

Assessment stage and task	Details	Unit(s) assessed
	Task 5: Professional discussion.	
	The professional discussion can only take place once the assessor has confirmed the bespoke client work project records, implementation, and observed delivery have been completed in sufficient detail.	
	Part 1: Consultation	
	Learners are required to consult with and gather health screening and assessment information from <b>one</b> 'real' client.	
	The consultation and assessment should last between 30 and 45 minutes.	
	All information gathered from the client should be recorded using the client consultation and assessment record.	
	The risk stratification of the client must be within scope of practice.	
	Part 2: Programme design and planning	
	Learners are required to plan a 10 session progressive programme for the client. The programme may include both reformer and mat exercises as appropriate for the client.	
	A full session plan should be provided for:	
	Session one.	
	Session eight.	
	The individual sessions should be recorded using the session plan record.	
	The interim changes to the progressive session programme should be recorded using the progressive programme record.	
	The full session plans must:	
	Be planned for a duration of 60 minutes.	

Assessment stage and task	<b>Details</b>	Unit(s) assessed
	Be structured to include:	
	<ul> <li>Application of the Pilates principles in all phases.</li> </ul>	
	<ul> <li>Exercises in all phases appropriate for the client.</li> </ul>	
	<ul><li>preparatory phase</li></ul>	
	<ul><li>main phase</li></ul>	
	<ul><li>closing phase.</li></ul>	
	The first planned session should be sent to and approved by your assessor for before implementation of the programme.	
	Part 3: Implementation and client feedback	
	Learners are required to implement eight sessions with the client. One of these sessions must be observed by an assessor (see Part 4)	
	The client needs to ideally participate in two sessions per week. This can be in person or online.	
	Implementation of the programme should be recorded using the 'Client feedback and instructor guidance' template.	
	One of the sessions with the client (assessor choice) must be observed by an assessor (this is Assessment 6.2).	
	Part 4: Observed delivery and evaluation	
	Learners need to demonstrate the skills required of a Pilates reformer instructor working with a one-to-one client.	
	They will be required to deliver one of the sessions from their bespoke client work project 10 session programme (assessor choice), as indicated in Part 3.	

Assessment stage and task	Details	Unit(s) assessed
	The session must be delivered live and in real time and observed by a qualified assessor. The submission of prerecorded evidence is not permitted for this assessment.	
	Following the delivery, learners will be given 30 minutes to complete a written evaluation of the session.	
	The bespoke client work project, session planning, observed delivery, and evaluation will be centre assessed by an assessor using the checklists provided by YMCA Awards.	
	Professional discussion	
	Once the assessor has confirmed that the bespoke client work project and observed practical delivery have been completed to the required standard, learners will undertake a 20 minute ±10% professional discussion with their assessor.	
	The aim of the professional discussion is to authenticate learner work and confirm the learner's knowledge and understanding.	
	The professional discussion will take place within four weeks of the project being signed off.	
	Learners may refer to their bespoke client work project during the professional discussion. No other notes are permitted.	
	The assessor will ask one broad overarching question to start the professional discussion and a maximum of six open-ended questions relating to the underpinning knowledge listed below.	
	Underpinning knowledge and understanding	
	During this assessment, learners will be assessed on their underpinning knowledge of the following:	

Assessment stage and task	Details	Unit(s) assessed
	Plan, deliver, and evaluate Pilates studio reformer (one-to-one):	
	o consultation and assessment	
	o programming for client needs	
	o delivery and evaluation skills.	
	Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 30 minutes per learner.	
7.1 Personal practice recording	Learners are required to record 60 minutes of their personal practice sessions (one full session or a series of shorter sessions) and evaluate their ability to perform 10 exercises from the advanced reformer repertoire.	The advanced reformer repertoire (D/651/2030)
	An assessor must observe this practice.	
	The evaluation must outline:	
	The physical or technical demands of the advanced reformer exercises, including aspects which they found challenging.	
	Reasons for exclusion or omission of any exercises (as required).	
	<ul> <li>Personal modifications and adaptations required to perform the exercises (as needed) and how this supports personal practice.</li> </ul>	
	Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 30 minutes per learner.	

Assessment stage and task	Details	Unit(s) assessed
7.2 Exercise analysis worksheet	Learners are required to analyse 20 exercises from the advanced reformer repertoire and fully complete the exercise analysis worksheet template.	The advanced reformer repertoire (D/651/2030)
	This should cover:	,
	The name of the exercise.	
	The purpose and benefits.	
	The technical and physical challenges presented.	
	<ul> <li>The movement plane, joint action, prime movers and other stabiliser/fixator muscles.</li> </ul>	
	Contraindications.	
	Modifications.	
	Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 30 minutes per learner.	
7.3 Instruct and evaluate	Learners are required to instruct and evaluate 10 exercises from the advanced reformer repertoire.	The advanced reformer repertoire (D/651/2030)
	The instruction of the 10 exercises must be observed by an assessor.	(
	The submission of prerecorded video evidence is permitted for this assessment.	
	The evaluation must outline:	
	A rationale for exercise selection.	
	Aspects of instruction they found challenging.	

Assessment stage and task	Details	Unit(s) assessed
	<ul> <li>Modifications and adaptations offered to support performance.</li> </ul>	
	<ul> <li>How they may support clients to work towards the advanced repertoire.</li> </ul>	
	Further information can be found in the YMCA Level 3 Instructing Pilates studio reformer learner assessment record (LAR).	
	The estimated time required by an assessor to mark and provide feedback for this assessment is 30 minutes per learner.	

### **Qualification content**

# Anatomy and physiology for Pilates and yoga professionals (J/651/2033)

### **Unit aim**

To provide the essential knowledge of the structure and function of the body systems.

### **Content**

1. Understand anatomical terminology		
<b>1.1 Identify</b> terms of location.	Definition of terms and anatomical examples of: <ul> <li>superior and inferior</li> <li>anterior and posterior</li> <li>medial and lateral</li> <li>proximal and distal</li> <li>superficial and deep.</li> </ul>	
1.2 Identify planes of movement.	<ul> <li>Three planes which divide the body.</li> <li>Joint actions and exercise examples in each plane:         <ul> <li>Frontal (coronal) plane:</li> <li>Passes from side to side at right angles to the sagittal plane.</li> <li>Divides the body into front and back sections.</li> <li>Related terminology – anterior and posterior.</li> <li>Joint actions include abduction and adduction.</li> <li>Exercise examples include side leg lifts (abduction), lateral raises, jumping jacks.</li> <li>Sagittal vertical plane:</li></ul></li></ul>	

#### o Transverse:

- Any horizontal plane of the body that is parallel to the diaphragm.
- Divides the body into upper and lower.
- Joint actions include rotation, pronation, and supination.
- Exercise examples spine rotations, oblique curls/crunches, twisting movement such as boxing jabs.

### 2. Understand the classification, structure, and function of the skeletal system

## **2.1 Summarise** the classification (types) of bones.

- Function and examples of each type of bone:
- Bones classified by their shape and function:
  - o long femur
  - o short tarsals
  - o flat scapula
  - o sesamoid patella
  - o irregular vertebrae.

### **2.2 Outline** the structure of bones.

### Different types of bone tissue:

- Compact and spongy/cancellous tissue.
- Long bone structure:
  - Articular cartilage at the ends of bones (where joints are formed).
  - o Epiphysis.
  - o Diaphysis.
  - o Periosteum.
  - Epiphyseal plates (growth plates).
  - Medullary cavity.
  - Hyaline cartilage.
  - Compact bone.
  - Cancellous bone.
  - Yellow and red bone marrow.

### **2.3 Name** and locate major bones:

- axial
- appendicular

#### Axial:

- o cranium, cervical vertebrae, thoracic vertebrae, lumbar vertebrae, sacral vertebrae, coccyx, sternum, ribs.
- Appendicular
  - scapula, clavicle, humerus, ulna, radius, carpals, metacarpals, phalanges, ilium, ischium, pubis, femur, patella, tibia, fibula, tarsals, metatarsals.

## **2.4 Outline** the structure and function of the spine

### Structure of the vertebral column:

- Regions cervical, thoracic, lumbar, sacral, and coccygeal.
- The number of vertebrae in each spinal section.
- Four natural curves (two kyphotic, two lordotic).
- Function of the curves.
- The roles that lordotic and kyphotic curves play in posture and achieving a 'neutral spine.'
- Potential ranges of movement in different spinal regions, including joint actions.

# **2.5 Outline** abnormal degrees of curvature of the spine and their implications for exercise

- Curvatures that deviate from optional posture/alignment and their implications on movement:
  - o scoliosis
  - hyper lordosis
  - hyper kyphosis
  - flat back
  - sway back.
- Factors that may contribute to sub-optimal spinal curvatures:
  - muscle imbalances
  - o genetic conditions
  - lifestyle factors
  - medical conditions
  - o pregnancy.

## **2.6 Describe** the functions of the skeleton.

### Functions and examples:

- Muscle attachments and <u>levers</u> muscles attach to bones (levers) and exert a force to pull on the bones to create movement at joints (fulcrum):
  - With consideration to different types of leverage systems in the body and examples (1st class – head and neck, 2nd class – ankle, and 3rd class – knee etc.).
- Protection of internal organs, e.g. brain is protected by cranium, heart and lungs are protected by the rib cage.

	<ul> <li>Production of red and white blood cells in the bone marrow.</li> <li>Skeletal framework provides body shape and a foundation structure.</li> <li>Storage of calcium and other minerals.</li> </ul>
2.7 Summarise the	Process of bone growth – ossification.
stages of bone development, growth, and repair	<ul> <li>Stages of bone growth – from foetal, birth, through to adolescence and older age.</li> <li>Remodelling process:         <ul> <li>Roles of osteoblasts, osteoclasts, and osteocytes.</li> <li>Role of calcium, vitamin d and hormones.</li> </ul> </li> <li>Ageing /lifespan process – when bones stop growing in length, when bones lose calcium, including the effects of menstrual cycle and menopause, osteopenia/osteoporosis.</li> <li>Factors that affect growth:         <ul> <li>exercise – weight bearing</li> <li>age</li> <li>lifestyle factors – smoking, nutrition, alcohol etc.</li> <li>sunlight</li> <li>hereditary factors.</li> </ul> </li> </ul>
2.8 Summarise the classification of joints	Examples of different classifications and differences in function and movement potential:  • fibrous – immoveable  • cartilaginous – slightly moveable  • synovial – freely moveable.
2.9 Outline the structure of freely movable joints:  • types • ligaments	<ul> <li>Structure of a synovial joint – joint capsule, synovial membrane, synovial fluid, ligaments, tendons, and cartilage (hyaline and fibrocartilage).</li> <li>Types – hinge, saddle, gliding, pivot, condyloid, ball and socket.</li> <li>Structural differences of different types of joint and how this affects movement potential.</li> <li>Function of ligaments: non-elastic, prevent/limit unwanted movement, attach bone to bone, joint stability.</li> <li>Function of tendons.</li> <li>Function of cartilage.</li> </ul>

### **2.10 Describe** the function of joints:

- joint actions at specific joints
- related planes of movement
- mobility
- stability

- The movement potential at different types of synovial joint (see types within 2.9.).
- Joint actions available at specific joints:
  - flexion and extension, e.g. knee
  - o adduction and abduction, e.g. hip
  - o rotation, e.g. between axis and atlas
  - o circumduction, e.g. shoulder
  - o horizontal flexion and horizontal extension, e.g. shoulder
  - o elevation and depression, e.g. shoulder girdle
  - o lateral flexion and lateral extension, e.g. spine
  - o pronation and supination, e.g. forearm radioulnar joint
  - plantar flexion and dorsi flexion, e.g. ankle
  - o protraction and retraction, e.g. shoulder girdle
  - inversion and eversion.
- Movement planes in which different joint actions happen:
  - frontal (coronal), sagittal and transverse planes.
- Factors affecting joint mobility and stability:
  - o structure see different types of joint
  - o location, e.g. hip and shoulder have different functions
  - flexibility of surrounding tissues (laxity of ligaments)
  - o injury (damage to articular surfaces).

### 3. Understand the classification, structure, and function of the muscular system

## **3.1 Summarise** the types and properties of muscle tissue

Different types of tissue, properties, and examples:

- Skeletal striated:
  - voluntary conscious control, controlled by somatic nervous system, found in consciously controlled skeletal muscles.
- Smooth:
  - involuntary unconscious control, controlled by autonomic nervous system, found in structures not under conscious control, e.g. blood vessels, digestive system.
- Cardiac heart:
  - involuntary striated, unconscious control, initiated by the sinoatrial node (SA node).

<b>3.2 Summarise</b> the structure of skeletal muscles	<ul> <li>Structure:</li> <li>muscle comprises of (or consists of) water (70%), protein (23%), minerals and substrates (7%):</li> </ul>
	- fascia
	connective tissue
	- muscle fibres
	– fasciculi
	– epimysium
	<ul><li>endomysium</li><li></li></ul>
	– perimysium
	– myofibrils
	<ul><li>myofilaments</li></ul>
	– sarcomeres
	<ul><li>actin and myosin</li></ul>
	<ul><li>mitochondria (cells) and their role.</li></ul>
	muscle attachments (and examples):
	– aponeurosis
	<ul><li>direct to bone</li></ul>
	<ul> <li>muscles cross joints, attach to bones via tendons</li> </ul>
	<ul><li>origins and insertions.</li></ul>
3.3 Describe skeletal	Different types of muscle fibres and characteristics:
muscle fibre types and their characteristics	<ul> <li>○ slow twitch type I – slow oxidative</li> </ul>
	<ul> <li>fast twitch type 2a (intermediate) – fast oxidative glycolytic</li> </ul>
	○ fast twitch type 2b – fast glycolytic.
	Relationships with:
	<ul> <li>Energy systems – aerobic and anaerobic:</li> </ul>
	<ul> <li>different types of training.</li> </ul>
	<ul> <li>Factors that influence fibre type:</li> </ul>
	– genetics
	– ageing
	<ul> <li>types of exercise.</li> </ul>
3.4 Name and locate	Location:
the major skeletal	o local/global
muscles:	o superficial /deep.

- upper, lower, anterior, posterior
- global and local postural stabilisers
- Location of:
  - o rotator cuff:
    - SITS (S: supraspinatus I: infraspinatus T: teres minor S: subscapularis)
  - o shoulder girdle:
    - levator scapulae, pectoralis major, pectoralis minor, serratus anterior, trapezius, rhomboids major/minor, teres major.
  - o arms and shoulders:
    - biceps, triceps, deltoids.
  - o back:
    - latissimus dorsi
    - spinal extensors: erector spinae, iliocostalis, longissimus, spinalis, multifidus, quadratus lumborum.
  - o pelvic girdle and hip:
    - flexors (iliopsoas): iliacus, psoas major
    - extensors: gluteals, gluteus maximus, and hamstrings group
    - adductors: magnus, brevis, longus, pectineus, gracilis, sartorius
    - abductors: gluteus medius, gluteus minimus, piriformis, tensor fascia latae.
  - legs:
    - quadriceps: rectus femoris, vastus medialis, vastus intermedius, vastus lateralis
    - hamstrings: biceps femoris, semimembranosus, semitendinosus
    - tibialis anterior, gastrocnemius, soleus.
  - o abdominals:
    - internal and external obliques, transversus abdominus, rectus abdominis.
  - respiratory muscles:
    - intercostals and diaphragm
    - accessory muscles forced inspiration (sternocleidomastoid, pectoralis minor and major, serratus anterior, scalenes and latissimus dorsi, and forced expiration (all abdominal group).
  - o 'core' and pelvic floor muscles.

<ul> <li>3.5 Outline the joint actions produced by major skeletal muscles:</li> <li>upper, lower, anterior, posterior</li> <li>global and local postural stabilisers</li> </ul>	<ul> <li>Related function and joint action produced by concentric and eccentric contraction of specific muscles.</li> <li>See 2.10 and 3.4.</li> </ul>
3.6 Describe the roles of skeletal muscles	<ul> <li>Roles - agonists (prime movers), antagonists, synergists, fixators:         <ul> <li>Examples in relation to exercises and movements.</li> </ul> </li> <li>Functions and properties of muscles:         <ul> <li>Contract to create movement or assist in the stabilisation of joints.</li> <li>Generate heat (shivering).</li> <li>Keep the body upright by resisting the force of gravity:</li></ul></li></ul>
3.7 Describe the process/principles of muscular contraction	<ul> <li>Interrelationship with nervous system:</li> <li>All or none law.</li> <li>Sliding filament theory, the role of actin and myosin, the formation of a cross-bridge during contraction, the role of ATP, motor neuron impulses, motor unit recruitment.</li> <li>Stretch (myotatic) reflex and inverse stretch reflex.</li> <li>Size principle of motor unit recruitment.</li> <li>Other principles of muscle work (biomechanics and kinesiology): <ul> <li>Muscles only pull (apply force) on bones (levers), they cannot push, contract in direction of fibres.</li> <li>Cross joints (fulcrum) and create movement.</li> <li>Work in pairs/groups.</li> <li>Muscles roles (see previous points).</li> </ul> </li> </ul>
<b>3.8 Outline</b> the types of muscular contraction	<ul> <li>Types of contraction:</li> <li>Concentric and eccentric (isotonic).</li> <li>Isometric.</li> </ul>

#### o Isokinetic.

- The effects of gravity on muscle work and the effects of fixed resistance/pulley equipment on muscle work.
- Advantages and disadvantages of isotonic/isometric movement in relation to everyday activity, activity for health, and within an exercise and fitness session, to include:
  - Causes and effects of delayed onset muscle soreness (DOMS).
  - Valsalva effect; functionality and effects on blood pressure.

## **3.9 Outline** the structure and function of the pelvic floor muscles

#### Structure:

- Deep and superficial layers.
- Fast and slow-twitch muscle fibres.
- Muscle attachments.

#### Function:

- Stability for the pelvic girdle.
- Support for organs and growing foetus during pregnancy.
- Controlling continence.
- As lower part of inner cylinder stability (along with diaphragm, abdominals, back muscles).
- o Counteract changes in abdominal pressure.

### 4. Understand the classification, structure, and function of the cardiovascular system

## **4.1 Summarise** the structures of the cardiovascular system

- Heart myocardium (cardio):
  - Muscular pump.
  - Two halves right (deoxygenated blood) and left (oxygenated blood).
  - Four chambers right and left ventricles, right and left atria
  - Valves (prevent back flow) bicuspid, tricuspid, aortic, pulmonary.
- Blood vessels (vascular):
- Comprise: arteries, arterioles (smaller versions of arteries), veins, venules (smaller versions of veins), and capillaries (smallest of the blood vessels).
  - o Capillaries:
    - Are the smallest blood vessels one blood cell thick.
  - Veins:
    - Carry blood towards the heart at low pressure.
    - Deoxygenated blood in all except the pulmonary veins.
    - Have thinner, less muscular walls.
    - Have a series of one-way (non-return) valves to prevent backflow of blood and require the assistance of skeletal muscle to help venous return.
    - The vena cava has two branches (inferior and superior) and returns blood from the body back to the right atrium.
    - The pulmonary veins return blood back to the left atrium.

#### Arteries:

- Carry blood away from the heart at high pressure.
- Oxygenated blood in all arteries except the pulmonary arteries.
- Are pressurised and have thick, smooth, muscular walls.
- The aorta is the largest/major artery that carries blood from the left ventricle to the body.
- The pulmonary arteries carry blood from the right ventricle to the lungs.

## **4.2 Describe** the function of the cardiovascular system

- Location/size of the heart:
  - Behind the sternum, just to the left of centre.
  - Size of a clenched fist.
- Functions:
  - o Circulation of:
    - blood (deoxygenated/oxygenated) and nutrients, hormones, medications.
- Terminology definitions of:
  - Stroke volume amount of blood pumped in one beat.
  - o Cardiac output amount of blood pumped in one minute.
  - Heart rate beats per minute, pulse monitoring points, e.g. radial artery.
- Effects of exercise on the above.

# **4.3 Outline** the flow of blood around the systemic and pulmonary systems

- Systemic circulation flow around the heart and body:
  - From heart to body aorta, arteries, arterioles, capillaries:
    - gaseous exchange at muscular levels (mitochondria).
  - From body to heart venules, veins, superior/inferior vena cava, right atrium (systemic).
- Pulmonary circulation flow around heart and lungs:
  - From lungs to heart pulmonary vein, left atrium, left ventricle (pulmonary).
  - From heart to lungs right ventricle, pulmonary artery:
    - gaseous exchange in lungs.
- Interrelationship with respiratory system and muscular system

   gaseous exchange.

### **4.4 Outline** blood pressure:

- classifications
- systolic/ diastolic

The body's need for blood pressure.

#### **Definitions:**

- Blood pressure as a measure of force in the artery walls.
- Systolic blood pressure:
  - The pressure in the arteries (contracting/pumping phase).
- Diastolic blood pressure:
  - The pressure in the arteries (resting/filling phase).

#### **Classifications:**

- Systolic and diastolic readings:
  - Optimal, normal blood pressure classifications.
  - Hypotension, pre-hypertension and hypertension (different stages).
- Current and up-to-date guidelines regarding blood pressure detailed from the following bodies:
  - World Health Organization (WHO)
  - National Institute for Health and Care Excellence (NICE)
  - American College of Sports Medicine (ACSM).
- Effects of exercise on blood pressure:
  - Linear increase.
  - Issues when working with hypertensive clients.
  - When exercise is contraindicated.

### 5. Understand the classification, structure, and function of the respiratory system

## **5.1 Summarise** the structure of the respiratory system

Respiratory tract – upper and lower

- Upper:
  - nose and mouth
  - o pharynx
  - larynx.
- Lower:
  - Trachea (windpipe).
  - Lungs.
    - Bronchus (bronchi).
    - Bronchioles:
      - Alveolus (alveoli) (capillaries) and location of gaseous exchange.
      - How the alveoli and capillaries link the respiratory and cardiovascular systems.

## **5.2 Outline** the function of the respiratory system

- The position of the lungs within the thoracic cavity.
- Function:
  - Intake of oxygen.
  - Removal of carbon dioxide.
  - Gaseous exchange.

- Diffusion: the movement of molecules from an area of greater concentration to an area of lesser concentration.
- The passage of air through respiratory tract during inhalation (inspiration) and exhalation (expiration):
  - o nose and mouth
  - o pharynx
  - o larynx
  - o trachea
  - bronchi
  - o bronchioles
  - alveoli.

### **Terminology**

- Breathing (pulmonary ventilation: inhalation/exhalation) the process of physically moving air in and out of the lungs.
- Respiration is the name given to the overall exchange of gases between the atmosphere and the blood. It involves:
  - External respiration the exchange of gases between the lungs and the blood.
  - Internal respiration the exchange of gases between the blood and the cells of the body.
  - The process of respiration:
    - Take in air from the atmosphere inhalation/inspiration.
    - Gaseous exchange alveoli.
    - Pass oxygen into the circulatory system.
    - Remove carbon dioxide from the circulatory system via exhalation.
- Composition of air during:
  - inhalation
  - exhalation.
- Average respiratory rate 12-20 breaths per minute:
  - Factors affecting respiratory rate and efficiency:
    - exercise
    - respiratory diseases chronic obstructive pulmonary disease (COPD), asthma, long covid, etc

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## **5.3 Outline** the mechanism and control of breathing

- Respiration is controlled by the respiratory centre located in the medulla oblongata of the brain.
- Breathing is triggered by:
  - Stimulation of the stretch receptors in the intercostal muscles.
  - Rising carbon dioxide levels.
  - Decreasing oxygen levels.
  - Stimulation from phrenic nerves.
  - o Chemoreceptors.
  - Decreased pH of the blood.
- The function and location of each muscle involved in inhalation and exhalation.
- Natural breathing:
  - Intercostals (internal and external):
    - Inspiration externals contract and lift the ribs up.
    - Expiration externals relax and the ribs lower.
  - Diaphragm:
    - Inspiration contracts and descends.
    - Expiration relaxes and ascends.
- Forced inspiration (inhalation):
  - accessory muscles scalenes, pectoralis minor, and sternocleidomastoid.
- Forced expiration (exhalation):
  - accessory muscles abdominals transversus.
- Differences/interrelationship:
  - Ventilation getting air in and out.
  - Respiration exchange of gases and transport of gases:
    - Ventilation air into lungs.
    - Pulmonary diffusion gaseous exchange in the lungs.
    - Circulation of gases around the body.
    - Tissue diffusion use of oxygen for energy production and removal of CO<sub>2</sub>.
  - Lung volume terminology/definitions:
    - Residual volume amount of air left in the lungs after exhalation.
    - Tidal volume amount of air moved in and out of the lungs in one breath.

	<ul> <li>Vital capacity – maximum amount of air that can be forcefully inhaled and exhaled in one breath.</li> </ul>	
<b>5.4 Outline</b> the process of gaseous exchange	<ul> <li>Gaseous exchange of oxygen and carbon dioxide in the body.</li> <li>The role of the alveoli and capillaries in gaseous exchange:</li> <li>Oxygen (alveoli) moves from the lungs to the bloodstream (capillaries).</li> </ul>	
	<ul> <li>Carbon dioxide passes from the blood (capillaries) to the lungs (alveoli) to be exhaled.</li> <li>The process of the diffusion of gases from areas of high concentration to areas of low concentration.</li> </ul>	

### 6. Understand the classification, structure, and function of the nervous system

<b>6.1 Summarise</b> the			
structure and divisions			
of the nervous system			

### Main divisions:

- Central nervous system (CNS):
  - The brain and spinal cord.
- Peripheral nervous system (PNS):
  - Motor and sensory nerves that branch out from the spinal cord.
- PNS is divided into:
  - o Somatic nervous system.
  - Autonomic nervous system (ANS).
  - The two sub-divisions of autonomic nervous system (ANS):
    - sympathetic (speeds up processes).
    - parasympathetic (slows down processes).

## **6.2 Describe** the functions of the nervous system

- · Communication and control system of body.
- Works collaboratively with the endocrine system.
- · Maintaining homeostasis.
- Three key roles:
  - 1. Sensory detects changes in the body's internal environment and gathers information about the external environment. Information is received from different stimuli:
    - Role of internal receptors:
      - chemoreceptors (chemical)
      - thermoreceptors (temperature)
      - baroreceptors (blood pressure)

	<ul> <li>proprioceptors (body positioning).</li> </ul>		
	<ol><li>Interpretation – analyses and interprets the changes sensed and selects the appropriate response.</li></ol>		
	Motor output – responds to the changes by signalling the required action, e.g. the secretion of hormones from the endocrine glands, or by initiating muscle contraction.		
<b>6.3 Outline</b> the role of	<ul> <li>Somatic nervous system:         <ul> <li>Motor and sensory nerves that connect the PNS to muscles and are involved in conscious activities (voluntary muscle actions).</li> </ul> </li> </ul>		
each subdivision of the peripheral nervous system:			
• somatic	Autonomic nervous system:		
• autonomic	<ul> <li>Motor and sensory nerves that connect the PNS to smooth and cardiac muscle and are involved in involuntary actions such as digestion, control of blood pressure etc.</li> </ul>		
	<ul> <li>Two divisions autonomic nervous system (ANS):</li> </ul>		
	<ul><li>sympathetic (fight or flight, war) – speed up.</li></ul>		
	<ul> <li>parasympathetic (rest and digest, peace) – slow down.</li> </ul>		
	Afferent and efferent nerves:		
	<ul> <li>Afferent nerves (sensory neurons) carry messages from the body receptors to the CNS. They are the first cells to receive incoming information.</li> </ul>		
	<ul> <li>Efferent nerves (motor neurons) carry messages from the CNS to the muscles and glands.</li> </ul>		
	<ul> <li>Interneurons (relay neurons) enable communication between sensory or motor nerves and the CNS.</li> </ul>		
6.4 Outline the	Structure and function of:		
structure of nerves	o axons		
	o dendrites		
	o cell body		
	o nucleus		
	o myelin sheath		
	o Schwann cells		
	o nodes of Ranvier		
	o synapses.		
6.5 Outline the process	Interrelationship with the muscular system:		
of a nerve impulse	<ul> <li>Action potentials:</li> </ul>		
	<ul> <li>How nerve impulses are conducted.</li> </ul>		

- Basic sliding filament theory.
- Role of actin and myosin in the formation of a crossbridge during contraction.
- The role of ATP.
- The 'all or none' law.
- Motor neuron impulses, motor unit recruitment.

### **6.6. Outline** the function of:

- motor units
- proprioceptors
- muscle spindles
- golgi tendon organs

- Motor unit comprises one motor nerve and all the muscle fibres it causes to contract.
  - The number of these muscle fibres can vary from one or two to 1000:
    - A stimulus must be strong enough to trigger an action potential to pass down the motor neuron.
    - All muscle fibres within a single motor unit will be maximally innervated by the action potential or none will.
    - The size principle of motor unit recruitment. Motor units are recruited in order of size, from small to large.
- Proprioceptor is a sensory organ which receives stimuli from within the body to give detailed and continuous information about the position of the limbs and other body parts.
- Muscle spindle is a proprioceptor located within the body of a skeletal muscle that primarily detect changes in the length of the muscle.
- Golgi tendon organ (GTO) is a proprioceptor located within a tendon that detects how much tension being transferred into the muscle.
- Interrelationship of proprioceptors with exercise:
  - Stretching (lengthening) PNF and developmental stretching.
  - Muscle contraction the more motor units which are activated, the greater the strength of contraction.

### 7. Understand the classification, structure, and function of the endocrine system

- **7.1. Summarise** the structure of the endocrine system:
  - major glands
  - hormones
- **7.2 Describe** the functions of the endocrine system:
  - hormones
  - major glands and the hormones they secrete

### Structure:

- Comprised of several glands that produce and secrete hormones.
- Hypothalamus (the 'master gland') because it controls the pituitary gland:
  - Controls most of the other endocrine glands in the body.
  - o Connects the nervous and endocrine system.
- Location of different glands (see table below).
- Function of other glands and hormones (see table below).
- Different types of hormone, e.g. steroid, peptide, anabolic, catabolic.
- How endocrine and nervous system communicate, e.g. feedback loops.

Gland	Hormone (to include)	Action/role (to include)
Thyroid	Thyroxine	To regulate metabolism of all cells and tissues in the body.
Parathyroid	Parathyroid hormone (PTH)	To control calcium levels within the blood.
Pituitary	Human growth hormone (HGH)	To regulate body composition, body fluids, muscle, and bone growth.
Pineal	Melatonin	To help maintain normal sleep patterns.
Adrenal	Epinephrine (adrenaline) Norepinephrine (noradrenaline)	Initiates sympathetic responses to stress (fight or flight).
	Cortisol	Regulates conversion of fats, proteins, and carbohydrates to energy.
Pancreas	be used for energy	Helps cells to take in glucose to be used for energy, i.e. lowers blood sugar levels.
	Glucagon	Signals cells to release glucose into the blood, i.e. raises blood sugar levels.
Ovaries	Oestrogen	Female 'characteristics.' Breast development.
	Progesterone	Menstrual cycle/egg production. Promote fat storage.
Testes	Testosterone	Male 'characteristics' include increased muscle, bone mass, and the growth of body hair.

### 8. Understand the classification, structure, and function of the energy systems

### **8.1 Describe** the three energy systems

- Definitions of terms:
  - o aerobic with oxygen
  - anaerobic without oxygen.
- Three energy systems:
  - o creatine phosphate (CP) or phosphocreatine (PC).
  - o anaerobic glycolysis/lactic acid
  - o aerobic.
- The energy systems resynthesise adenosine triphosphate (ATP) which is the energy currency of the body but is stored in limited amounts.

# **8.2 Summarise** the role of the energy systems in the resynthesis of adenosine triphosphate

- Anaerobic creatine phosphate or phosphocreatine (ATP-PC or Alactic system):
  - ATP and creatine phosphate (CP) are present in very small amounts in the muscle cells – so limited stores.
  - Can supply energy very quickly because oxygen is not needed for the process - but only lasts up to 10 seconds.
  - No lactic acid is produced in the process (Alactic) so no harmful waste products.
  - Byproduct creatine (non-fatiguing) is replenished (after around three to five minutes rest).
  - Activities -high intensity, very short duration.
- Anaerobic lactic acid (glycolytic) system:
  - Uses carbohydrates (glucose) stored in the muscles as glycogen without oxygen.
  - Energy is produced quickly lasts around two minutes if trained.
  - Fatiguing by product lactic acid (muscle burn/oxygen deficit).
  - Activities moderate to high intensity, short duration.
- Aerobic system (with oxygen):
  - Uses carbohydrates (glucose/glycogen) and fats to replenish ATP with oxygen.
  - Because oxygen is required for the process, energy production takes longer but can continue for a much longer duration. So slower to engage but can continue for a longer duration.
  - Because of the presence of oxygen, no lactic acid is produced.

- Waste products CO<sub>2</sub>, and water (removed easily and non-fatiguing).
- Activities low to moderate intensity, long-term duration.
- o Role of mitochondria (only in aerobic energy production):
  - Cellular structure which turns the energy in food into fuel that the cell can use for energy (ATP).

### Role of each macronutrient in energy production.

- Metabolism or metabolic processes (chemical processes) comprises catabolism and anabolism:
  - Catabolism breakdown of nutrients for energy production (destructive/breaks down).
  - Anabolism body uses energy released by catabolism to remake ATP (constructive – rebuilds).

### The effects of exercise on energy systems:

- How each energy system works in conjunction with the others (not insolation) to produce energy in a range of activities.
- How exercise variables result in the adaptation of the relative contribution of each energy system.
- Predominant system depends on intensity and duration:
  - The effects of intensity (increased intensity would increase the contribution of the anaerobic systems).
  - The effects of duration (longer-duration activities would require increased input from the aerobic energy system because the anaerobic systems cannot function effectively for long periods).
  - Excess post-exercise oxygen consumption (EPOC). the amount of oxygen the body needs to remove lactic acid and repay the oxygen debt (and return to normal after exercise).
  - Interrelationship between energy systems and efficiency of cardiovascular, respiratory, and muscular systems.

### 9. Understand the interrelationship between the anatomical and physiological systems

- **9.1 Explain** the Interrelationship of the body system:
  - movement systems – musculoskeletal system
  - fuelling systems

     circulatory,
     respiratory,
     energy
  - response systems – nervous, endocrine

All body systems work together:

- If one system is malfunctioning due to disease, then all systems will be impacted to a greater or lesser extent.
- Activity and exercise will affect all systems, in some way.
- The body systems change throughout the lifespan.
- Some examples of interrelationship:
  - Respiratory system takes in oxygen that is circulated by the cardiovascular and circulatory system.
  - Oxygen transported by the cardiovascular system is used by the muscles (and other body cells) to produce energy.
  - All body cells and systems require energy (ATP and energy systems) for daily living as well as movement.
  - Hormones and nutrients (endocrine and digestive system) are circulated by the cardiovascular system.
  - The nervous system controls movement of the body stimulating muscles (muscular system) to contract and pull on the bones (skeletal system).
  - The endocrine system and nervous system are main communication and control systems of the body (chemical and electrical).
  - Endocrine glands release hormones which are circulated by the cardiovascular and circulatory system.
  - The heart, a component of the circulatory system and responsible for pumping blood, is also a muscle (cardiac) and is controlled by the nervous system.

### 10. Understand lifespan changes which affect the body system, health, and wellbeing

- **10.1 Outline** the effects of different lifespan changes to the body systems:
  - young people (13-18)
  - antenatal and postnatal period
  - older adults (50 plus)

All body systems change in response to the lifespan, particularly:

- Young people in the 13-18 age range, to include:
  - Skeletal development (endomorphs, ectomorphs, mesomorphs).
  - Growth and development of the spine.
  - Maturation of the skeletal system (13-18 years).
  - Growth plates and injury risk.
  - Percentage (%) of muscle mass changes from birth.
  - Age at which bone growth complete.
  - Body fat differences in adolescence.
  - Obesity levels increasing and body mass index (BMI) measures.
- Antenatal and postnatal, to include:
  - Skeletal system changes including potential postural changes.
  - Hormone changes the effect of relaxin and other hormones including Human Chorionic Gonadotropin (HGC), progesterone and oestrogen.
  - Changes affecting balance.
  - Considerations for exercise including warning signs suitable exercise pre 16 weeks and post 16 weeks together with considerations for postnatal.
- Older people (50 plus), to include:
  - Ageing and the musculoskeletal system.
  - Hormone changes, including effects of menopause.
  - Loss of bone mass and effects of exercise.
  - Changes in osteoblast/osteoclast activity.
  - Implications of reduction in bone-mineral density and connective tissue:
    - osteopenia/osteoporosis and gender differences
    - osteoarthritis
    - hyaline cartilage wear and tear
    - increase risk of falls and fractures
    - joint degeneration
    - reduced range of motion.

- Sarcopenia loss of muscle mass and effects on strength.
- CVD risk and ageing between genders (men at greater risk from younger age and women after menopause).
- Exercise considerations and risks.

**NB:** Additional qualifications are required to work with the groups in this section.

### 11. Understand how physical activity, movement, and exercise affect the body systems

# **11.1 Describe** how physical activity, movement and exercise affect the body systems:

- short term
- long term

• Effects specific to type of physical activity and movement.

#### Short term

### Muscular and skeletal systems

- Muscle temperature and overall core body temperature increases.
- Levels of lactic acid in the blood rise, causing a burning or aching sensation in the muscles, temporary muscle fatigue.
- Greater ease of joint movement due to increased flow and viscosity of the synovial fluid into the joints, which nourishes the cartilage.
- Increased metabolic activity and demand for oxygen.
- Increased dilation of capillaries within the muscle.
- Increased pliability of muscle and connective tissue.
- DOMS may be experienced (one to two days after training).

### Circulatory and respiratory systems

- Increased breathing rate and depth of breathing to bring more oxygen into the body and remove carbon dioxide.
- Increased efficiency of gaseous exchange.
- Vasodilation of blood vessels to the muscles.
- Vasoconstriction of blood vessels to the internal organs.
- Anticipatory heart rate response.
- Increase of heart rate to circulate blood and oxygen.
- Increase of stroke volume, cardiac output, and systolic blood pressure.

### **Nervous system**

- Neuromuscular pathways engaged.
- Increased nerve to muscle connection.

### **Energy systems**

- ATP broken down to produce energy.
- ATP resynthesised through different energy systems, depending on intensity and duration of activity and individual fitness (physiological adaptations).

### **Endocrine system**

- · Increased number of hormones circulating.
- Release of hormones like endorphins and adrenaline.

### Long term

### Skeletal

- Improved bone mineral content (increase in bone density).
- Improved development of peak bone mass in formative years (up to age 30).
- Maintenance of bone mass premenopausal.
- Reduces rate of bone loss post menopause.
- Reduced risk of osteoporosis.
- Improved release of synovial fluid into the joints.
- Cartilage is nourished by synovial fluid, which can assist with the management of osteoarthritis and maintains joint health.
- · Improved joint mobility and range of motion.
- Hyaline cartilage becomes thicker, protecting the joints against wear and tear.
- Stronger ligamentous attachments.
- Improved stability of the joints.
- Reduced risk of falls and bone fractures in older adults with osteoporosis.
- Improved posture and joint alignment
- Reduced risk of low back pain.

#### Muscular

- Hypertrophy of muscle fibres (increase in size due to increased number of myosin and actin within muscle).
- Increased muscle strength and endurance.
- Improved muscle tone and shape.
- Improved capillarisation of muscles and greater potential for delivery of oxygen and nutrients and removal of waste products improves endurance.
- Increased size and number of mitochondria in muscles to enable greater aerobic energy production.

- Improved posture.
- Stronger tendinous attachments.

#### Risks of exercise

- Increased risk of injury.
- Increased loading placed on synergists.
- Shortening/weakening.
- Poor technique may lead to altered roles, e.g. synergists/fixators becoming prime movers.
- Overuse.
- Delayed onset muscular soreness (DOMS).

## **Circulatory and respiratory**

- · Increased strength of intercostal muscles and diaphragm.
- Decreased breathing rate.
- Improved potential for gaseous exchange.
- Stronger heart (cardiac muscle):
  - Increased resting and maximal stroke volume.
  - Increased maximal cardiac output.
- Greater heart efficiency:
  - o Improved recovery heart rate.
  - Decreased resting heart rate (heart rate at rest).
  - Lower working heart rate at same intensity or effort.
- Increased number of capillaries in muscles:
  - Improved blood flow to working muscles.
  - Increased potential for oxygen delivery to muscles.
  - Increased potential for removal of waste products (lactate) from the muscles.
  - Lowering of blood pressure.
- Increased size and number of mitochondria (cells used for aerobic energy production).

### **Nervous system**

- Strengthening of existing nerve connections and development of new ones.
- Improved synchronisation of motor recruitment which helps achieve stronger muscular contractions.
- Improved balance due to improved efficiency of proprioceptors.

- Improved reaction times due to increased frequency and strength of nervous impulses.
- Improved agility due to improved speed and frequency of signal and neural connections.
- Improved neuromuscular pathways and connections.
- More effective transmission of nerve impulses.
- Improved proprioception spatial and body awareness.
- Improved skill-related fitness (motor fitness) all components.
- Improved motor unit recruitment.

## **Energy systems**

- Aerobic adaptations.
- See circulatory and respiratory adaptations which enable:
  - Increased potential for oxygen delivery to muscles.
  - Increased potential for removal of waste products from the muscles.
- Anaerobic adaptations:
  - Increased storage capacity of creatine phosphate and muscle glycogen.
  - Improved resistance to fatigue during anaerobic conditions (lactate tolerance).
  - Improved efficiency at removing lactic acid and byproducts.
  - Improved recovery rate after high-intensity exercise.

#### **Endocrine system**

- Increases in testosterone and human growth hormone post resistance training.
- Improved insulin sensitivity.
- Increases in insulin growth factor-1.
- Greater glucagon production.
- Improved mental state (endorphins).
- Improved confidence and motivation (testosterone).
- Reduced tension and anxiety (endorphins).
- Euphoria (endorphins).
- · Reduced sensitivity to pain (endorphins).

# Providing a positive customer experience to support a Pilates business (K/651/2034)

## **Unit aim**

To provide the essential knowledge for working in the sport and physical activity sector, including knowledge of:

- Health, safety, and welfare requirements.
- Supporting customers and participants.
- Professional practice and regulatory bodies.
- Business acumen that supports a Pilates business.

## Content

1. Understand how to maximise the customer experience in an exercise and fitness environment	
1.1 Explain the essential information a Pilates professional should know about their participants and customers	<ul> <li>Local demographics.</li> <li>Motivations, personal background, and health background for screening purposes.</li> <li>Expectations and aspirations.</li> <li>How to interpret information to understand customer needs.</li> <li>How customer and participant information affect the products and services offered.</li> </ul>
1.2 Analyse participant expectations and targets within an exercise and fitness environment	<ul> <li>How to interpret customer data to understand the different types of customer needs.</li> <li>The different requirements of customers, including their expectations and aspirations.</li> <li>How an exercise and fitness business will meet different types of customer requirements.</li> <li>How to identify and confirm a customer's expectations.</li> <li>The importance of responding promptly to a customer seeking assistance.</li> </ul>
1.3 Explain methods to manage participant and customer behaviour in a positive and inclusive manner	<ul> <li>Different types of conflict and behaviour issues and how to manage them:         <ul> <li>Conflicts between:</li> <li>members and other members</li> <li>members and staff</li> </ul> </li> </ul>

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	members and organisation/facility.
	<ul> <li>Conflicts relating to:</li> </ul>
	<ul> <li>bookings and use of apps to book</li> </ul>
	<ul><li>equipment out of use</li></ul>
	<ul><li>class cancellations</li></ul>
	<ul> <li>cover teachers and instructors</li> </ul>
	<ul> <li>lack of equipment, broken or out of use</li> </ul>
	<ul><li>cleanliness</li></ul>
	<ul><li>space</li></ul>
	<ul> <li>people standing in 'their' space (group exercise).</li> </ul>
	Managing conflict:
	<ul> <li>Use of listening skills and communication skills.</li> </ul>
	<ul> <li>Methods to manage participant behaviour in a positive and inclusive manner:</li> </ul>
	<ul> <li>Behaviour management strategies to support participant engagement.</li> </ul>
	<ul> <li>Learning theories to support personalised learning (visual, auditory, kinaesthetic).</li> </ul>
1.4 Explain how a	Present themselves in a professional and approachable
Pilates professional	manner in accordance with organisational standards.
should conduct themselves to portray a professional image	<ul> <li>Show personal attributes required to display a high level of customer service.</li> </ul>
	<ul> <li>Professional membership organisations and their codes of conduct (some are listed in appendices).</li> </ul>
	<ul> <li>Professional demeanour, e.g. uniform and personal attributes, positive first impressions.</li> </ul>
1.5 Explain how to positively influence a 'customer journey' and improve customer and participant retention	A typical customer journey.
	<ul> <li>The impact of the instructor's role on the participant experience.</li> </ul>
	The importance of customer retention and how to influence.
	<ul> <li>How to build social support and create an inclusive and welcoming environment:</li> </ul>
	<ul> <li>The importance of being accessible and approachable.</li> </ul>
	<ul> <li>How to build social support and inclusion.</li> </ul>
	<ul> <li>Methods to build rapport, e.g. friendly and approachable.</li> </ul>
	<ul> <li>Respecting equality and diversity.</li> </ul>
	<ul> <li>How to support the safe and enjoyable use of an environment or facility.</li> </ul>
	Promote a fun, safe, and inclusive environment:

 Exemplary customer service skills: problem solving, discretion, influencing, teamwork, suitable language use etc. Develop rapport with customers. Friendly and approachable manner. Respecting equality and diversity. Support needs, e.g. deliver an informative facility tour. Deal with enquiries effectively. Offer an end-to-end service. The feedback cycle and the impact of the instructor role on the customer experience. The impact of a positive team culture on the internal and external customer experience: O When working with: internal customers external customers. Impact: inclusion retention satisfaction. customer experience. Awareness of roles and responsibilities of self and others involved in the programme including the client and other staff/professionals. 1.6 Evaluate different The importance of regular communication with customers. methods of Methods of communicating: communicating with face-to-face participants and customers telephone written (letters, email, posters) social media and digital technology. Methods of building rapport and how these influence the customer experience. Different communication techniques and how to use them: observation/non-verbal techniques/body language

open and closed questions

active listening.

- How to adapt communication methods to meet the needs of participants for differing backgrounds, cultures, sport/activity experiences etc.
- Different methods to obtain participant and customer feedback and channels of recording and reporting in line with relevant procedures:
  - The importance of gathering feedback to meet customer expectations.
  - Different methods to obtain feedback and channels of recording and reporting in line with organisational procedures or own business procedures.
  - How to interpret information to understand needs.
- 1.7 Explain the barriers to communication and how to adapt communication effectively to meet the needs of diverse populations
- The importance of communicating effectively with a wide range of people from different cultural and demographic backgrounds.
- How to adapt communication methods to meet the needs of participants.
- Barriers and potential solutions:
  - o Language difficulties.
  - Level of knowledge, relating to sport and activity experience.
  - Cultural religions and personal beliefs and/or values.
  - Demographic and background.
  - o Impairments, e.g. visual, hearing, cognitive.

## 2. Understand how to maintain health, safety, and welfare in an exercise and fitness environment

# **2.1 Outline** health, safety, and welfare requirements relevant to own working role

- Importance:
  - Everyone has a responsibility in the environment etiquette.
  - Duty of care.
  - Negligence, omission and commission.
  - Safety and wellbeing.
  - Professionalism.
- Relevant requirements organisational and national guidelines/legislation:
  - Safeguarding.
  - Risk assessment.
  - Duty of care.
  - Managing emergencies.
  - Reporting procedures confidentiality, data protection.
  - Public liability Insurance.
  - First aid regulations.
  - Equality and diversity.
  - Conflict of interest.
  - Emergency action plans.
  - Normal operating procedures.
  - Control of substances hazardous to health (COSHH).
  - Reporting of injuries, diseases and dangerous occurrences regulations (RIDDOR).
  - Electricity at work regulations.
  - Personal protective equipment (PPE).
  - Equipment storage and maintenance:
    - Manual handling and equipment use.
    - Health and safety implications of the assembly, dismantling, hygiene and storage of equipment.
    - Manufacturer's guidelines and where to locate them.
- Policies and legislation relating to inclusion and disabled people(s), equity/equality/diversity/social services/adults at risk:
  - Information that needs to be communicated to customers and participants.

# 2.2 Explain how to carry out a risk assessment and report risks

- The importance of risk assessments.
- The risk assessment process and procedures relevant to the environment (health and safety executive), including likelihood and severity or risk.
- How to identify and report hazards relating to:
  - Activity areas, facilities, equipment.
  - People, client behaviour.
  - Physical risks.
  - Working practices, including lifting and handling of equipment.
  - o Hygiene.
  - Security procedures within a facility.
- Risk assessments and reporting procedures.
- · Maintaining safety of themselves and others.
- Control measures appropriate to the environment, activity and people
- How to control risks associated with hazards eliminate, reduce, isolate, control
- The appropriate person/position to contact within an environment when hazards and risks cannot be controlled personally.
- Cleaning and maintenance requirements in an exercise environment:
  - Principle uses and suitability of:
    - Cleaning substances relevant to the environment, e.g. antibacterial spray.
    - Cleaning equipment, e.g. mop, paper towels etc.
  - Standard operating procedures for routine maintenance and cleaning, adhering to:
    - manufacturer's guidelines
    - control of substances hazardous to health (COSHH)
    - personal protective equipment (PPE).
  - Effective communication with customers and colleagues regarding cleaning:
    - Appropriate signage to identify potential hazards whilst cleaning.
    - How to maintain the safety of themselves and others.
    - The different types of waste e.g., hazardous and nonhazardous, and how to dispose of it, in line with the organisation's environmental policy.

## 2.3 Explain how to The types of emergencies that may occur in an exercise and fitness facility: manage emergencies likely to occur in an accidents, e.g. strains and sprains exercise and fitness medical emergencies, e.g. drowning, cardiac event. environment Typical roles of individuals responsible for health and safety in an exercise and fitness environment. The importance of following emergency procedures calmly and correctly. How to maintain the safety of people involved in typical emergencies, including children, older people, and disabled people. **2.4 Summarise** the Standard operating procedures. procedures and Emergency action plans (EAP). recording documents Organisational policy and procedures. that should be in place to maintain health and • Recording documents to include: safety health screening accident and emergency reporting – RIDDOR etc. risk assessment etc. 2.5 Explain the What is meant by safeguarding: safeguarding o children requirements relating to adults and adults at risk. own role The different types of abuse that an exercise and fitness instructor may encounter. • Possible signs of abuse. The responsibilities and limitations of an exercise and fitness instructor. The procedures to follow to protect oneself from accusations of abuse. Organisational procedures and policies: Disclosure and Barring (DBS). Safeguarding adults and adults at risk. Safeguarding children. Responsible person for managing safeguarding issues. Reporting procedures for safeguarding. The statutory agencies responsible for safeguarding. When it may be necessary to contact statutory agencies. How to maintain confidentiality of information relating to possible abuse.

## 3. Understand professional practice in the exercise and fitness sector

# **3.1 Outline** guidance provided by governing and/or professional bodies for the sector

 The essential principles, values, or ethical codes of practice laid out by governing and/or professional bodies for the sector.

#### Sources:

- Sector bodies.
- National governing bodies (NGB).
- Health and safety executive (HSE).
- Home countries sports councils.
- The child protection in sport unit (CPSU).
- Government led independent reviews, for example duty of care.
- Relating to working role, scope, boundaries, continuing professional development (CPD), health and safety, and safeguarding etc.

# **3.2 Explain** professional ethics related to own role

- Professional memberships:
  - For example, CIMSPA, EMD-UK, Pilates Method Alliance, Fitness Professionals (Fit Pro), The society for the Pilates method, and various other Pilates specific organisations etc.
- How to work within the role boundaries and scope of own professional knowledge and competence based on qualifications and experience, e.g. additional qualifications needed to programme exercise for children and young people, perinatal, individuals with disabilities, or individuals with long-term conditions.
- Representation of skills, abilities, and knowledge.
- Business practices and professional code of conduct.

# **3.3 Describe** opportunities and requirements for professional development and career progression in the sector

- How to keep knowledge and skills up to date.
- The importance of accessing continuous professional development (CPD) relevant to role.
- How to access industry-recognised CPD.
- How to keep up to date with industry trends.
- Relevant legislation/policy and guidelines relating to CPD.
- The role of reflective practice and how to complete selfreflection/evaluation to aid personal development.

## 4. Understand business processes and information technology that can support a Pilates business

# **4.1 Outline** business planning, finance, and marketing relevant to own role

- Components of financial planning that apply to:
  - An organisation,
  - Setting up and running a personal Pilates business (selfemployed, partnership, company, community interest, or not-for-profit etc.).
  - o Components include:
    - profit and loss
    - tax and national insurance
    - liability insurance
    - music license fees.
- Relevant marketing strategies and techniques e.g., brand awareness, self-promotion, market research (such as SWOT/PEST analysis), and how to develop a marketing plan:
  - Marketing techniques and how a marketing plan can support building a client base.
  - The use of SWOT or PEST analysis to assess business viability.
  - Performance indicators and ways of monitoring business success.
- How IT systems support business operations:
  - finance and accounting
  - marketing and sales
  - record keeping, sales and invoicing
  - client and group management
  - class scheduling and session reminders
  - o retention levels
  - data analysis/interpretation (and how to present it)
- How to store, record and manage data:
  - GDPR and DPA legislation, confidentiality etc.

# **4.2 Describe** products and services available within a Pilates business and how to support this

- Product offer and services within an organisation or a personal business.
- How to upsell and support secondary spends where appropriate.

# **4.3 Describe** the use of technology and social media to support a Pilates business

- The importance of digital media.
- How to develop a digital plan.
- · Social media/digital profiles and their impact.
- Different technology to support online delivery.
- Current legislation and ethical practice that affects the use of technology:
  - Data Protection Act
  - intellectual property (IP)
  - patents and copyright.
- See 4.1 How IT systems support business operations.
- Technological advancements to support the customer experience to increase physical activity levels, motivation, and focus:
  - wearable technology
  - o pedometers
  - o mobile phone applications.
- How to set-up a professional social media/digital profile:
  - o associated risks and benefits.

# Health screening, risk stratification and scope of practice (L/650/4855)

#### **Unit aim**

To provide the knowledge and skills to:

- Preliminary screen participants.
- Evaluate potential risks and benefits of participation.
- Assess suitability of exercise for participants within scope of practice.
- Signpost participants to other professionals.

#### Content

# 1. Understand the role of health screening and risk stratification prior to participation

1.1 Explain the importance of screening, informed consent, and assessment prior to participation

- Importance and purpose of health screening and risk stratification:
  - The links when working within scope of practice and ensuring client safety.
  - To gather relevant health history and current health status, particularly in relation to risk factors for coronary heart disease.
  - To identify medical conditions that would necessitate medical clearance or referral to an appropriate medical professional, or other clinician, or medically supervised exercise programme:
  - To identify past and present injuries and disabilities.
  - To clarify own scope of practice to the client.
- Screening methods:
  - evidence-based pre-exercise health screening methods PAR-Q, PAR-Q+
  - non-evidence based organisation/employer devised methods
  - health commitment statement.
- Verbal screening when and how to apply, including communication skills:
  - Conducted prior to every practical session.
  - Privacy considerations.

- How to deal with issues presented that fall outside of scope.
- Uses of screening information:
  - When to refer/signpost/take action and what action to take in each circumstance (low, medium, high risk, outside scope of practice):
  - o When to defer, e.g. feeling unwell.
  - When ready to participate.
  - When modifications needed and what type of modifications.
- Purpose and importance of Informed consent:
  - Prior to sharing information.
  - Prior to any physical assessment.
  - Prior to participation in a Pilates session.
  - The risks and benefits of participation must be explained, and opportunities given for questions to be asked. All information should be recorded, signed, and dated.
- Purpose and uses of assessment:
  - o Health and wellbeing assessments:
    - blood pressure, body mass index (BMI), body composition
    - posture
    - lifestyle and psychological questionnaires
    - nutritional assessment tools food diaries etc.
  - Fitness assessments targeted toward components of fitness (CV, strength, flexibility).
  - Functional (activities of daily living [ADL]) sit to stand or standing balance etc.
- Use of technology body stat machines etc.
- Assessments provide baseline information that can determine the appropriateness of exercises selected.

**NB:** Consider assessments in terms of practicality, e.g. uses if employed (leisure centre/private clubs) or freelance/ self-employed, uses for group Pilates sessions, or one-to-one etc.

# **1.2 Summarise** the information to gather from clients prior to participation

- Information to include:
  - Age and sex (as both are potential cardiovascular disease risk factors).
  - Relevant health history.

Current health status, particularly in relation to risk factors for heart disease and identification of medical conditions that would necessitate medical clearance or referral to an appropriate medical professional, or other clinician, or a medically supervised programme Past and present injuries, and disabilities. Activity experience and preferences. Fitness and skill level. Pregnancy. Reasons for attending – goals, aims. Barriers and motivators etc. With consideration to legislation – GDPR/data protection and confidentiality in relation to gathering, storage, using and sharing of personal information, including gaining consent for sharing. **1.3 Evaluate** the Health screening methods: effectiveness of PAR-Q, PAR-Q+, organisation/employer devised different screening methods, health commitment statement, verbal methods and risk screening. stratification tools Other recognised risk stratification tools (Irwin and Morgan traffic light system/other national/international evidence-based tools, national/locally agreed protocols, including referral/care pathways. Consider: The validity and reliability of different methods and tools. The advantages and disadvantages of different methods. The effectiveness of different methods and extent to. which each method: supports working within scope of practice maximises individual safety guides recommendations for participation (ready, defer, refer etc.). 1.4 Summarise how to • Use information to identify reasons for inclusion or exclusion: use pre-exercise health Identify absolute contraindications to participation screening to risk stratify (exclusion). clients Identify factors that indicate that a client is at 'low, medium, or high risk' of an adverse event occurring

during participation.

high risk).

What action to take for different risk levels (low, medium,

## Reasons for temporary deferral. o When to refer/signpost/take action: individual needs beyond scope of practice moderate to higher risk stratification. 1.5 Identify the Definition of contraindicated – risks outweigh benefits. contraindications to Definition of controversial – need to evaluate risks/benefits. exercise Consideration to: Individual needs and the information gathered. Risks, e.g. sprains, strains, fainting, hypoglycaemia, heart attack, falls. Benefits for health. Absolute contraindications for exercise (general) - use American College of Sports Medicine (ACSM) 'Guidelines for exercise testing and prescription.' Exercise referral toolkit - currently being revised by the National College for Sport and Exercise Medicine (NCSEM): Any uncontrolled or unstable medical condition, e.g. not managed by medication. Resting systolic blood pressure at (or above) 180mmhg / DBP 100mmha. Uncontrolled resting tachycardia at or above 120 bpm. Experiences a negative change or increase in pain during exertion. Dizziness or excessive breathlessness during exertion. Reference to the current ACSM guidelines for specific conditions (use of PAR-Q+ and algorithm). Other reference sources: Absolute contraindications specific to different disabilities and health conditions - use ACSM reference source -'Exercise management for persons with chronic diseases and disabilities. Perinatal use guidelines from Royal College of Obstetricians and Gynaecologists (RCOG) or American College of Obstetricians and Gynecologists (ACOG). 1.6 Explain own scope Scope of practice is: of practice and when to • Working within own level of competence – knowledge, skills, signpost clients to other experience, exercise genre delivery, and participants needs specialists for (risk stratification). appropriate support

• Working within own level of confidence – if in doubt,

signposting may be safest decision.

	<ul> <li>Refer or signpost when exceed scope.</li> <li>Ensures professional and ethical practice</li> <li>Alternative sources of advice and support to whom you can defer/refer the individua.</li> <li>How and when to make referrals into the leisure industry.</li> </ul>
1.7 Outline how to provide advice and guidance to support clients	<ul> <li>Positive, motivating, and empowering approach.</li> <li>Use of effective communication skills.</li> <li>Sensitivity and respect, honesty, transparency.</li> <li>Emphasis on participant safety.</li> <li>Credible advice and guidance appropriate to own level of expertise.</li> <li>Be an ambassador for the sector, leading by example.</li> <li>Clarify the role and responsibilities of all involved in the programme.</li> </ul>

# 2. Be able to use information to risk stratify clients and provide appropriate advice regarding participation

## 2.1 Analyse preexercise screening and lifestyle information to assess a client's readiness to participate and make lifestyle changes

#### See LO1

 Information to be applied in all subsequent practical assessments and client work (plan and deliver and consultation units).

# **2.2 Use** risk stratification to assess risks of participation

#### See LO1

 Information to be applied in all subsequent practical assessments and client work (plan and deliver and consultation units).

## **2.3 Outline** individual needs outside of scope

#### See LO1

 Information to be applied in all subsequent practical assessments and client work (plan and deliver and consultation tasks).

# 2.4 Analyse client information and make appropriate recommendations regarding participation

Informed and educated decision making to advise:

- When to participate.
- When to defer.
- · When to signpost or refer.
- Who to refer to:
  - o other qualified exercise professionals
  - medical professionals.
- Ways to overcome any barriers to participation using appropriate motivational strategies, where practicable.
- Information to be applied in all subsequent practical assessments and client work (plan and deliver and consultation tasks).

# **2.5 Provide** advice and guidance within scope of practice to support clients

- Advice and guidance relating to:
  - Participation in Pilates and other physical activity.
  - Lifestyle changes and healthy eating.
  - Reasons for referral or deferral.
  - Services and sessions that meet individual needs.

# Health awareness and lifestyle management for Pilates professionals (L/651/2035)

## **Unit aim**

To provide knowledge of lifestyle factors that influence health and increase the risk for the development of long-term health conditions and how these may be managed.

#### Content

# 1. Understand components of a healthy lifestyle and factors that affect health and wellbeing

**1.1 Describe** the components of health and total fitness in supporting wellbeing

Definitions of health and components of total fitness and physical fitness. Each component is interrelated and may impact others; some basic examples are:

- Physical fitness can influence medical health and vice versa.
- Mental and emotional health can influence motivation to participate in exercise, e.g. those with more severe long-term mental health conditions are often less active.
- Social fitness can influence mental health e.g., the effects of isolation, and physical fitness, e.g. friends and family can support or discourage participation in activity which influences physical fitness.
- Medical health conditions will affect the appropriateness of some types of exercise.
- Nutritional fitness, and diet will affect physical performance and medical health.
- Spiritual fitness and belief systems will influence lifestyle choices that impact health, e.g. choosing to be active, effects of religious dietary practices on eating behaviours etc.
- Other examples of balance and imbalance:
  - Athletes may have high levels of physical fitness but may not be healthy, e.g. eating disorders (medical and mental/emotional health affected).
  - Bodybuilders prioritise aesthetics over function and health.
  - Fitness models.

0	Individuals may have a social network, but the network
	may or may not support healthy lifestyle choices that
	affect each component, e.g. physical, medical etc.

# **1.2 Describe** the effect of lifestyle on health and wellbeing

- Components of a healthy lifestyle and unhealthy lifestyle.
- Effects of the following on body systems (link with anatomy and physiology):
  - smoking not smoking
  - o alcohol no alcohol
  - o healthy eating unhealthy eating
  - physical activity levels and preferences and physical inactivity
  - o weight management
  - rest and relaxation, relaxation training
  - stress (signs, symptoms, effects, and management)
  - work patterns/job
  - relevant personal circumstances life, work, relationships etc.
- The UK physical activity guidelines for different ages and the dose-response relationship.
- The benefits of physical activity/exercise to health and wellbeing.

## 2. Understand basic principles of nutrition and healthy eating

# **2.1 Outline** healthy eating advice recommended by the national food guide model

- Current government healthy eating guidelines and evidencebased recommendations – 'Eatwell guide.'
  - At least five portions of fruit and vegetables every day.
  - All meals based around starchy carbohydrates.
  - Some dairy or dairy alternatives lower fat and sugar options.
  - Some beans, pulses, fish, eggs, meat, and other proteins.
  - Two portions of fish every week (one should be oily).
  - Choose unsaturated oils and spreads and eat in small amounts.
  - Drink six to eight cups/glasses of fluid a day.
  - Small and infrequent consumption of food/drinks high in fat, salt or sugar.

The relationship between nutrition and health:

• The influence of nutrition on health:

	<ul> <li>obesity</li> <li>cholesterol</li> <li>type 2 diabetes</li> <li>metabolic syndrome</li> <li>omega 3 and 6 ratio, cancer risk</li> <li>mood and mental health.</li> <li>Health risks of unhealthy eating and poor nutrition.</li> <li>Health risks of alcohol (including calorific value of alcohol).</li> <li>Health risks of excess caffeine.</li> </ul>
2.2 Outline the dietary role and food sources of the main macronutrients and micronutrients	<ul> <li>The main macronutrients and micronutrients and their dietary role and function.</li> <li>Food sources of carbohydrate (including fibre and gut health), fats (saturated, unsaturated, essential fatty acids), protein, vitamins, minerals, water.</li> <li>Calorific value of nutrients.</li> <li>Timescales for digestion.</li> </ul>
2.3 Explain the importance of adequate hydration	<ul> <li>Best sources to stay hydrated</li> <li>Different types of drinks – isotonic, hypotonic etc.</li> <li>Risks of dehydration.</li> <li>Signs and symptoms of dehydration.</li> </ul>
2.4 Outline how to educate and encourage clients to make healthy food choices within scope of practice	<ul> <li>Use of current government healthy eating guidelines and evidence-based recommendations and how they can be applied to individual clients.</li> <li>Role boundaries and scope of practice.</li> <li>When to signpost.</li> <li>Individuals with needs outside of scope of practice: <ul> <li>pregnant and breastfeeding</li> <li>health conditions, diabetes, obesity etc.</li> <li>children and babies</li> <li>sports people and athletes.</li> </ul> </li> <li>Awareness of the energy balance equation: <ul> <li>energy in components, e.g. food</li> <li>energy out components, e.g. activity, resting metabolic rate (RMR).</li> </ul> </li> <li>Application:</li> </ul>

- weight management
- o weight loss
- o weight gain.
- Other factors influencing energy in and energy out.

## 3. Understand a range of health conditions and medically controlled diseases influenced by lifestyle

- **3.1 Describe** the role of physical activity in the prevention and management of health conditions and medically controlled diseases
- Reference to Chief Medical Officer (CMO) reports and benefits of exercise for preventing health conditions.
- Common conditions and diseases:
  - obesity
  - o osteoporosis
  - o mental health stress/depression/anxiety
  - back pain
  - cardiovascular disease and risk factors (hypertension, angina, coronary heart disease (CHD), stroke)
  - o pre-diabetes and diabetes
  - prevalent forms of arthritis
  - o cancer
  - o asthma
  - o chronic obstructive pulmonary disease (COPD).

#### With consideration to:

- Prevalence and implications for UK population, e.g. populations typically affected.
- Causes/risk factors of conditions.
- Signs and symptoms of conditions.
- How activity and Pilates can support management of conditions.
- Scope of practice boundaries and links with risk stratification.
- **3.2 Summarise** the risks and benefits of participation in activity associated with different health conditions
- Benefits how physical activity/Pilates can help to prevent and manage common health conditions.
- Risks of activity and Pilates, e.g. strains, sprains, hypoglycaemia, cardiac arrest, fainting, asthma attack.
- Risks associated with participation for specific health conditions (as above) but greater risk for some individuals (links with risk stratification).
- The importance of working within scope of practice.

# **3.3 Outline** how to research medical conditions in relation to participation and advice

- How to seek evidence-based/reputable health and wellbeing advice.
- Credible and reputable information sources and research methods:
  - National Institute for Health and Care Excellence (NICE)
  - World Health Organisation (WHO)
  - National Health Service (NHS).
- Importance of evidence-based practice.
- Importance of scope of practice and maintaining boundaries.

## 4. Understand theories and strategies to support positive behaviour change

# 4.1 Summarise the key concepts of a range of behaviour change theories and approaches and how they can motivate positive lifestyle behaviour change

- Key concepts of:
  - Arousal theories.
  - Stages of change/transtheoretical model (TTM).
  - Motivational interviewing.
  - COM-B model which links with long term conditions.
  - Positive psychology which links with long term conditions.

#### 4.2 Describe

motivations and barriers to physical activity and lifestyle change

- Psychosocial factors that can influence lifestyle choices and behaviour change.
- · Socio-economic and environmental factors:
  - education
  - housing
  - poverty
  - o employment etc.
- Psychological factors that can influence lifestyle choices and behaviour change:
  - Intrinsic and extrinsic motivation and role in motivation and adherence to exercise and lifestyle behaviour change.
  - Social support and peer pressure.
  - Individual client needs and differences:
    - experienced, inexperienced.
- Active and inactive. Barriers to change:
  - perceived and actual barriers social, environmental, financial, psychological
  - self-recognition of own barriers

## reinforcement. Motivators: o health self-determination self-efficacy. Use of psychological questionnaires to assess motivation, confidence and readiness to change. 4.3 Describe how to Characteristics at different stages: identify a client's Precontemplation – not thinking about change. readiness to change Contemplation – weighing up the benefits. Preparation – starter preparation. Action – changes commenced – less than six months. Maintenance – changes sustained for longer than six months. Termination – old behaviour deleted. Lapse – short-term lapse from change process. Relapse – return to old behaviour ("fall off the wagon"). 4.4 Summarise How to educate clients on the components of a healthy lifestyle: appropriate interventions/strategies Why it is important for a client to take personal to support clients with responsibility for their own health and motivation. lifestyle change, A range of appropriate interventions and strategies to use including the use of at each stage: technology decisional balance sheet/pros and cons/cost benefit analysis psychological readiness scales fitness testing overcoming barriers goal setting – how to set and review SMART goals, short and long-term, process and outcome etc. behavioural modification techniques planning for relapse/contingency planning, rewards, focusing support systems reinforcement strategies self-monitoring. Technological advancements that can be used to support motivation and focus:

	<ul> <li>Text/teams/zoom and email contact.</li> <li>Wearable technology.</li> <li>Pedometers.</li> <li>Mobile phone applications, e.g. those that link with wellbeing outcomes from body scan assessments.</li> </ul>
4.5 Explain professional role boundaries and scope of practice in relation to offering lifestyle advice	<ul> <li>Own role boundaries and scope of practice.</li> <li>When and how to signpost to other health professionals who can support individuals:         <ul> <li>GP – responsible for all referrals to other services.</li> <li>Counsellor – stress, mental health.</li> <li>Smoking cessation.</li> <li>Alcohol and drug support.</li> </ul> </li> </ul>

# The history, origins and fundamentals of the Pilates method (M/651/2036)

### **Unit aim**

To provide the essential foundation knowledge of the Pilates method, including:

- The history and origins of Pilates.
- The fundamentals and principles of Pilates.
- The original 34 Contrology exercises and how these have evolved.
- Modern and contemporary approaches to Pilates.
- The main studio apparatus.
- The health benefits of Pilates.
- The skills to evaluate own performance of Pilates matwork exercises and make recommendations on how to develop own practice.

### Content

## 1. Understand the origins and fundamentals of Pilates

- **1.1 Outline** the history of Pilates and the key people involved in developing the method
- Awareness of timescales for key events.
- Creator Joseph Pilates:
  - Brief overview of his early life and his migration to the USA with his wife Clara and her input into developing the method.
  - His inventions: Reformer (1927), Cadillac (1940s). and other apparatus. Created to compliment the mat exercises (Contrology).
  - Books: 'Your health' (1934) and 'Return to life through Contrology' (1945).
  - Contrology (original 34 exercises) never patented.
- Joseph's New York Pilates studio and his legacy:
  - Method became known as 'Pilates' after Joseph's death (1967).
  - First generation teachers who trained with Joe directly include: Eve Gentry, Kathy Stanford Grant, Carola Trier, Bob Seed, Ron Fletcher, Lolita San Miguel, Bruce King, Mary Bowen, Romana Kryzanowska etc.
  - Romana Kryzanowska, a ballet dancer, was approached by John Howard Steel to take over the running of New

- York studio after Joseph's death (circa 1967). She created levels, refined exercises and positions and added additional exercises to the repertoire, including super advanced versions. These have now been incorporated into the 'return to life' programme.
- Second generation teachers trained by first generation teachers include: Moira Merrithew, Rael Isacowitz, Alan Herdman (NB: Alan Herdman was the first instructor to bring Pilates to the UK (circa 1980s) and trained many UK instructors).
- Third generation teachers trained include: Penny Latey, Lynne Robinson, Gordon Thompson, Michael King.
- Awareness of the litigation and court ruling, in October 2000, regarding use of the name 'Pilates' and the role of Ken Endelman, Ron Fletcher & John Howard Steel (Sean Gallagher wanted to trademark the name Pilates). The outcome of the ruling was that Pilates is a descriptive term and a method of exercise, no one can monopolise the method or the generic word used to describe it.
- Pilates includes a whole repertoire of exercises beyond the Contrology mat exercises.
- Brief overview/awareness of:
  - The development of Pilates in the UK.
  - UK National Occupational Standards (NOS) SkillsActive (2005).
  - EHFA standards (2014).
  - CIMSPA standards (2023).
  - o EMD UK and SPM (2024) scope of practices
- Different approaches to Pilates may be described as:
  - Contrology original 34 exercises performed as a dynamic flow with a set number of each exercise. Use full set of studio apparatus e.g., reformer etc., to adapt, modify, and support performance towards the mat exercises.
  - Classical follow original approach more closely, dynamic flow with set repetitions. In USA – west coast and east coast variations.
  - Contemporary closely follow original and sequential flow, with more modifications and use of apparatus to support performance.
  - Modern usually slower with exercises modified and different flow.
  - Fitness usually more of a body conditioning style approach, higher repetitions of exercises.

- Therapeutic exercises more adapted and modified to work with specific needs.
- Useful references (listed in appendices):
  - Joseph Pilates 'Return to life through' Contrology
  - Joseph Pilates 'Your health'
  - John Howard Steel 'The caged lion. Joseph Pilates and his legacy.'
  - Javier Pérez Pont and Esperanza Romero 'Hubertus Joseph Pilates – A true history of Joseph Pilates'
  - Penny Latey 'Modern Pilates'
  - 'The society for the Pilates method': https://thesocietyforthepilatesmethod.com/history/.

# **1.2 Explain** the purpose, benefits, and contraindications of the 34 original mat exercises

- The 'Contrology' matwork repertoire (original 34 exercises created by Joseph Pilates) are considered the pinnacle of the Pilates system (classical/contemporary) to work towards:
  - The sequence is performed as a flowing sequence transitioning from one exercise to the other without rests and with specific repetitions for each exercise.
  - In 'Return to life': Contrology book, Pilates guides to master one exercise before moving on to the next.
- Levels were introduced by Romana Kryzanowska and other elders with some exercises excluded at specific levels.
- The mat exercises are the hardest level of the work and exercises would need to be modified (or excluded) for newcomers and/or deconditioned and for participants with injuries and medical conditions which present contraindications:
  - The full apparatus/equipment can assist and support work towards the mat (additional qualifications required).
  - Mat exercises can be excluded or modified and adapted using a range of methods (including using small equipment, if required).
- Useful references (listed in appendices):
  - Joseph Pilates 'Return to life through Contrology'
  - Rael Isacowitz 'Pilates anatomy'
  - Tracy Ward 'Science of Pilates.'

# **1.3 Identify** the main Pilates studio apparatus and how these can support performance of the matwork system

- List of studio apparatus, for example:
  - reformer
  - o cadillac, trapeze
  - ladder barrel, arc barrel, spine corrector
  - wunda chair, baby chair
  - ped-o-pull
  - o foot corrector.
- Uses strength, support, feedback, proprioception, length, stability etc.
- Useful references (listed in appendices):
  - o Rael Isacowitz 'Pilates The complete guide'

**NB**: Studio equipment is covered in more detail in additional qualifications.

# **1.4 Explain** the principles and application of basic, preparatory exercises to prepare for Pilates matwork

- The aim of preparatory exercises:
  - Build awareness of the body.
  - Prepare for more challenging Pilates matwork exercises.
  - Support and enable participation and progression when studio apparatus not available.
- Consideration should be given on how, why, and when to apply these exercises:
  - Contraindications and specific pathologies, such as some spine conditions.
  - When studio apparatus not available.
- Exercise modifications may replicate some of the movement patterns of the original 34 exercises, modifications may include:
  - Use of different start positions prone, supine, side lying, all fours, seated, standing.
  - Isolation of movement phases and parts of specific exercises.
  - Balanced approach flexion, extension, rotation, lateral flexion.
  - Use of small equipment, such as bands, balls and bricks/blocks to assist performance.
- The controversy with using the term 'pre-Pilates,' which some basic and preparatory exercises are sometimes referred to as.
- Other terms that are used:
  - foundation or foundational

	o preparatory Pilates/exercises
	o fundamentals
	<ul> <li>essential principles</li> </ul>
	o basic principles
	○ Pilates - based or biased.
1.5 Describe the six	Principles introduced by Freidman and Eisen (circa 1980s):
main principles of	o <b>centering</b>
Pilates and how these can be applied to each	o concentration
matwork exercise	o control
	o precision
	o flow
	o breath.
	With specific consideration to apply the three fundamental principles to each exercise or movement pattern:
	o <b>centering</b>
	o control
	o breath.
	Different schools and instructors have modified or use different terms to describe some principles.
	Useful references:
	Phillip Friedman and Gail Eison – 'The Pilates method of physical and mental conditioning'

# **1.6 Explain** the benefits of Pilates for health, mental wellbeing, and improvement of daily living

- The health benefits of Pilates and its recommendation.
- What Pilates can do for clients (with consideration to all components of fitness).
- How Pilates can contribute to the improvement of health, mental health, and daily living.
- The importance and impact of having a positive attitude towards health and wellbeing and mental health.
- The role of sport and physical activity and Pilates on mental health.
- The effect of Pilates on the anatomical and physiological systems.

## **1.7 Explain** the physical benefits of Pilates

- Physical benefits include:
  - mobility
  - posture
  - stabilisation
  - o strength
  - micro-control
  - o coordination.
- Link to Anatomy and physiology knowledge and effects on body systems:
  - Abnormal degrees of curvature of the spine and their implications.
  - The effects of exercise on posture.
  - Core stabilisation exercises, impact on posture, potential for injury/aggravation of problems.
- With consideration to:
  - Function of muscle groups not just action.
  - Awareness of fascia and fascial lines (basic).
  - Role of thoracolumbar fascia on stability and function.
  - o Cervical, scapula, pelvic stability.
  - Spine mobility and stability.
  - Awareness of current and related research.

 Differences in practice, for example Contrology was originally performed with flat spine, contemporary use neutral spine, other schools use 'aligned' spine.

**NB**: Additional information on posture and stabilisation and therapeutic applications covered in other qualifications.

## 2. Be able to practice and evaluate own performance of Pilates matwork exercises

# 2.1 Practice and evaluate own performance of Pilates matwork exercises

- Practice to include the Contrology exercises or modifications and adaptations of these.
- With consideration to:
  - When to exclude exercises, e.g. contraindications or specific pathologies, such as some spine conditions.
  - Physical and technical challenges of the Contrology exercises.
  - When and how to modify, e.g. preparatory exercises, including use of small equipment.
- Own practice to ensure:
  - o Correct alignment and technique.
  - Embodiment and good body awareness.
  - o The application of Pilates principles & fundamentals.

# 2.2 Make recommendations on how to develop own practice

- Embodied awareness.
- Goals and strategies to progress and improve performance.
- Appropriate stages of progression.

# Plan, deliver and evaluate Pilates matwork sessions and programmes (R/651/2037)

### **Unit aim**

To develop the knowledge and skills required to safely and effectively plan, deliver, and evaluate Pilates matwork sessions and programmes sessions and programmes to individuals and groups, within scope of practice.

#### Learners will:

- Consult with clients and check readiness to participate.
- Plan, deliver, and evaluate group and one-to-one Pilates sessions.
- Plan, implement, and evaluate progressive Pilates programmes.

#### Content

# 1. Understand how to screen and assess individuals prior to participation in Pilates sessions or programmes

- 1.1 Explain the importance of appropriate consultation, pre-activity screening and assessment of client(s) prior to participation
- Methods used should be appropriate for setting, e.g. group or one-to-one work.
- Links to 'health screening, risk stratification, and scope of practice' unit.
- Screening methods and risk stratification models to use:
  - ACSM model algorithm and current PAR-Q+ with follow-on questions.
  - Verbal screening prior to participation and how to conduct it.
  - o See 1.3.
- Purpose of screening:
  - Appropriate advice and guidance.
  - Reasons for deferral, signposting, and referral.
  - Working within scope of practice and role boundaries, competence, confidence, and qualifications.
  - Identifying suitability of sessions and identifying individuals who need specialist support.
  - Determining session content and exercise selection.
  - Supporting individuals with lifestyle behaviour change.
- How to conduct:

## Build rapport. Connect with people to create a positive experience. Adapt communication style to suit client needs. Present accurate information, e.g., sensitivity, discretion, non-judgmental manner, respect the individuality of the client, language and terms understood by client/simplify technical information, etc. 1.2 Describe For one-to-one and bespoke client work. appropriate consultation How to conduct a consultation – environment, timing, and communication structure etc. techniques • The importance of rapport and relationship established between instructor and participant(s) during the consultation on engagement and adherence. Link to lifestyle awareness unit and behaviour change and different communication techniques and how/when to use them in a consultation: observation/non-verbal techniques/body language negotiation open/closed questioning motivational interviewing techniques, e.g. developing "importance," "confidence," and "readiness" dealing with resistance to change using open-ended questioning reflective statements paraphrasing summarising decisional balance sheet active listening. 1.3 Summarise the Methods used should be appropriate for setting, e.g. group or one-to-one work. information that should be obtained when Health screening and readiness to participate. consulting with, and • Health status and reasons for deferral or exclusion. pre-screening individuals prior to Experience attending Pilates. participation in a Pilates Previous and current activity levels. -based matwork session • Lifestyle information, e.g. eating behaviour, smoking etc. Postural assessment. **1.4 Explain** when to Contraindications present. signpost or refer

participants to other healthcare professionals prior to participation in Pilates matwork sessions	<ul> <li>Needs that may exceed scope of practice/qualifications, e.g. perinatal.</li> <li>Other professionals may include:         <ul> <li>dieticians</li> <li>counsellors</li> <li>GPs</li> <li>physiotherapists</li> <li>osteopaths</li> <li>other exercise or Pilates instructors.</li> </ul> </li> </ul>
1.5 Outline potential goals for those attending Pilates matwork sessions and the importance of regular participation to support these goals	<ul> <li>Goals for group participation.</li> <li>Goals for bespoke clients.</li> <li>How to set relative goals linked to individual needs, wants, and motivators.</li> <li>Example goals may include: <ul> <li>Improve posture.</li> <li>Scapular stability.</li> <li>Pelvic stability.</li> <li>Trunk stability.</li> <li>Spine mobility.</li> <li>Shoulder and hip mobility.</li> <li>Strength.</li> <li>Progression towards more advanced exercises.</li> </ul> </li> </ul>
1.6 Describe how to record and store information	<ul> <li>Records to be: <ul> <li>clear and structured</li> <li>use an appropriate format.</li> </ul> </li> <li>Purpose: <ul> <li>To maintain a record of the work.</li> <li>For monitoring purposes, e.g. progression.</li> <li>Evidence, in the event of litigation.</li> </ul> </li> <li>Storage and use to align with GDPR and data protection guidelines.</li> </ul>

## 2. Understand how to plan, design and deliver Pilates matwork sessions and programmes to meet participants needs

# **2.1 Describe** planning considerations for delivering Pilates matwork sessions and programmes

- For group and one-to-one work.
- Outline essential considerations when planning and delivering Pilates sessions and programmes.
- Understand how to safely prepare activity areas for use and how to safely set-up and store equipment.
- Legalities relating to the use of music and the selection of appropriate music (if used).

# **2.2 Describe** how to assess and manage risks in the exercise environment

- For both group and one-to-one work.
- Screening of individuals and checks to clothing and attire etc.
- Equipment checks.
- Environment checks.

# **2.3 Outline** how to structure a Pilatesbased matwork session

- For group and one-to-one work.
- Three phases of session:
  - preparatory
  - o main
  - o closing.
- Exercises may include:
  - Pilates matwork exercises derived from the original Contrology repertoire with modifications or exclusions (as appropriate).
  - Preparatory exercises to support clients to prepare for more challenging exercises (as appropriate).
  - Provision of adaptations, progressions, and regressions for each exercise included in the session/programme, i.e. from looking at the whole Pilates system, know which exercises to omit or include to support the client's progress.
  - Importance of sequencing, flow, and transition between exercises.
- The importance of muscle balance when planning sessions/programmes.
- How to programme exercise to develop:
  - Mobility.
  - Stability.
  - Strength and flexibility exercises.

Movement patterns to accommodate activities of daily living. How to sequence a class or one-to-one session including: breaking down exercises layering transitions between exercises. 2.4 Explain appropriate Exercise selection according to Pilates approach and method and relevant movement and system used. patterns for the Content to prepare for activities in main phase. preparatory phase of a Appropriate for group needs. group Pilates matwork session 2.5 Explain appropriate Exercise selection according to Pilates approach and method and system used. and relevant movement patterns for the • Content to prepare for activities in main phase. preparatory phase of a Appropriate for bespoke client needs. one-to-one Pilates matwork session **2.6 Explain** how to Exercise selection according to Pilates approach and method and system used. structure the main phase of a group Pilates • See 2.3. matwork session Appropriate for group needs. How to break down and build on the original Pilates exercises. How to layer the exercises for a mixed ability group. How to sequence the class considering flow and transition from one exercise to another including where to demonstrate from. Know how to sequence a group session including breaking down exercises, layering, transitions between exercises. With consideration to: Activities of daily living (ADL) exercises, e.g. exercises that address the movement patterns/muscle actions required for activities of daily living. Flexibility and range of motion exercises (static and dynamic stretching and mobilisation of joints). Effective coaching/teaching/instructing methods, e.g. to cater for different learning styles, tailoring instructing styles/communication methods to individual needs). The purpose of each exercise or movement pattern.

## **2.7 Explain** how to structure the main phase of a one-to-one Pilates matwork session.

- Exercise selection according to Pilates approach and method and system used.
- See 2.3.
- Appropriate for bespoke client needs.
- How to break down and build on the original Pilates exercises
- How to layer the exercises.
- How to sequence the session considering flow and transition from one exercise to another including where to demonstrate from.
- Know how to sequence a one-to-one session including breaking down exercises, layering, transitions between exercises.
- With consideration to:
  - Activities of daily living (ADL) exercises, e.g. exercises that address the movement patterns/muscle actions required for activities of daily living.
  - Flexibility and range of motion exercises (static and dynamic stretching and mobilisation of joints).
  - Effective coaching/teaching/instructing methods, e.g., to cater for different learning styles, tailoring instructing styles/communication methods to meet individual needs.
- The purpose of each exercise or movement pattern.

#### 2.8 Explain

appropriate, relevant movement patterns and flexibility work for the closing phase of a group Pilates matwork session

- Exercise selection according to Pilates approach and method and system used.
- Content to relate to activities in main phase.
- Appropriate for group needs.

#### 2.9 Explain

appropriate, relevant movement patterns and flexibility work for the closing phase of a oneto-one Pilates Matwork session

- Exercise selection according to Pilates approach and method and system used.
- Content to relate to activities in main phase.
- Appropriate for bespoke client needs.

### **2.10 Identify** a range of exercise modifications and adaptations

- For both group and one-to-one work.
- Preparatory exercises and Pilates-based matwork exercise variations.
- Modifications, may include:
  - Changes to lever length.

	<ul> <li>Isolating body parts or components of the full movement.</li> <li>Changing start position.</li> <li>Modifying range of motion.</li> <li>Adapting the flow and sequence.</li> <li>Exclusion of specific exercises (as appropriate to participant needs).</li> <li>Use of small equipment to modify exercises, e.g. small balls, bands, and bricks.</li> <li>With a basic awareness of how the studio apparatus support the whole Pilates system.</li> </ul>
2.11 Explain the importance of correct instructions and demonstration of safe and effective exercise technique	<ul> <li>For both group and one-to-one work.</li> <li>To support development of safe and effective and embodied exercise technique.</li> <li>To ensure safe and effective practice.</li> <li>To support clients towards independent practice.</li> </ul>
2.12 Describe how to utilise and adapt communication and instructional skills to monitor, improve, and correct performance  2.13 Summarise the benefits and limitations of different methods of monitoring exercise effectiveness or intensity.	<ul> <li>For both group and one-to-one work.</li> <li>Effective tailoring of coaching/teaching/instructing methods to:         <ul> <li>cater for different learning styles</li> <li>meet individual needs.</li> </ul> </li> <li>The most appropriate communication methods when delivering:         <ul> <li>group classes</li> <li>one-to-ones.</li> </ul> </li> <li>Methods – demonstration, verbal cueing, hands-on assistance/tactile coaching, visualisation, e.g. imagery.</li> <li>When to proactively engage with clients and when not to.</li> <li>When to offer hands-on assistance/touch correction and when not to.</li> <li>For both group and one-to-one work.</li> <li>Observation during session.</li> <li>Observation of movement assessment and technique over a period of time.</li> <li>Communication during exercise, e.g. question, answer, and feedback.</li> <li>Client feedback during and after session and using technology trackers.</li> </ul>

#### 3. Understand how to monitor and review Pilates matwork sessions and programmes

### **3.1 Explain** the importance of regular reviews of the participant's progress

- For both group and one-to-one work.
- To ascertain how well the session and/or programme is meeting group and/or individual client needs/progress towards goals.
- To identify any improvements that can be made to the programme plan etc.
- To signpost clients to other aspects of the facility if they show an interest in other areas/activities, e.g. apparatus-based Pilates (where available) and other activities (as appropriate).

#### 3.2 Identify

opportunities to collect feedback from participants

- For both group and one-to-one work.
- Methods of evaluating how well Pilates based matwork sessions and programmes are meeting the client needs:
  - Before, during and after sessions.
  - Verbal feedback and discussion.
  - Written questionnaires and surveys.
  - Electronic questionnaires and surveys, e.g. survey monkey.

# **3.3 Explain** how to use the information gathered from participant feedback to promote motivation, adherence and outcome success

- For both group and one-to-one work.
- Monitor and review the effectiveness of the Pilates based matwork group classes and one-to-one work.
- Support future planning and delivery for individuals and groups.

### **3.4 Outline** how to reflect on your own practice to inform future sessions

- Kolb model.
- Importance of reflective practice.
- Reflection on action and inaction.
- Use of feedback from participants and supporters.
- Consideration to session content, structure, instructional and communication skills, safety, effectiveness, inclusivity etc.
- Use of reflective practice to identify CPD needs.

#### 4. Be able to plan and prepare for Pilates matwork sessions and programmes

- **4.1 Collect** and record information from participants to inform session structure, programme objectives and goal setting
- Methods appropriate for setting, e.g. group or one-to-one work.
- Health screening and risk stratification.
- Posture.
- Support the client to recognise and develop their intrinsic and extrinsic motivation to exercise.
- Set relative goals linked to individual needs, wants and motivators.
- Be an ambassador for the sector, leading by example and displaying positive health behaviours.
- **4.2 Assess** and manage risks in the exercise environment
- Group environment and one-to-one work.
- Prepare self, the environment, and equipment as appropriate to the session.
- Carry out relevant risk assessments showing appropriate safety considerations for the environment.
- Organise own work duties alongside colleagues and clients to ensure that activity areas are ready for use and that all relevant equipment is set-up, dismantled, and stored safely where appropriate.
- **4.3 Screen** participants and use information to provide credible advice and guidance
- For both group and one-to-one work.
- Verbal and written screening (PAR-Q+).
- **4.4 Select** appropriate equipment for the specific activity area and session type, including music (if required)
- For both group and one-to-one work:
  - mats
  - small equipment (when required) small balls, bands, bricks
  - o music (if required).
- 4.5 Analyse and use information gathered to design a safe and effective exercise Pilates matwork session and programme
- For both group and one-to-one work.
- All phases to be appropriate to individual and/or group needs.
- Use information to offer credible advice and guidance appropriate to own level of expertise to promote positive healthy lifestyle choices.

	<ul> <li>Provide structure which facilitates forming healthier habits, taking responsibility and adherence over short, medium and long-term timeframes.</li> <li>Monitor targets, review and evaluate progress – adapt accordingly.</li> </ul>
<b>4.6 Provide</b> a rationale for the exercises used in the session and programme	<ul> <li>For both group and one-to-one work.</li> <li>Rationale and reasons for exercise selection and inclusion, such as:         <ul> <li>The number of exercises included.</li> <li>The exercises excluded and why.</li> <li>Any exercises modified and why.</li> <li>How modifications support progression.</li> </ul> </li> </ul>
<b>4.7 Plan</b> safe and effective Pilates matwork sessions for groups	<ul> <li>Preparatory, main and closing phase.</li> <li>Apply knowledge to plan safe and effective Pilates based matwork group classes for a range of clients within scope of practice, using appropriate equipment and methods.</li> </ul>
<b>4.8 Plan</b> safe and effective Pilates matwork sessions for one-to-one work	<ul> <li>Preparatory, main, and closing phase.</li> <li>Apply knowledge to plan safe and effective Pilates based matwork sessions for individual clients and bespoke one-to-one work (within scope of practice), using appropriate equipment and methods.</li> </ul>
<b>4.9 Apply</b> the Pilates principles to all phases of the session	<ul> <li>For both group and one-to-one work.</li> <li>Plan all phases in line with the Pilates principles and fundamentals.</li> </ul>
4.10 Provide suitable adaptations including progressions and regressions for all exercises	<ul> <li>For both group and one-to-one work.</li> <li>Amend session/programme content to meet the needs of individuals, whole group and the environment.</li> <li>See example exercise lists and variations in Appendix 1.</li> <li>Variables, may include: <ul> <li>Changes to lever length.</li> <li>Isolating body parts or components of the full movement.</li> <li>Changing start position.</li> <li>Modifying range of motion.</li> <li>Adapting the flow and sequence.</li> </ul> </li> </ul>

	<ul> <li>Exclusion of specific exercises (as appropriate to participant needs).</li> </ul>
<b>4.11 Record</b> programme plans in an appropriate format	<ul> <li>Accurate and current records.</li> <li>Use of appropriate format.</li> <li>Appropriate storage and use (GDPR and data protection).</li> </ul>

#### 5. Be able to instruct group Pilates matwork sessions and programmes

# **5.1 Engage** participants from the outset using effective communication to create a positive, motivating, and empowering environment that supports participation and adherence

- Use a range of communication techniques to:
  - Introduce oneself.
  - Build rapport.
  - Create a positive customer experience.
  - Suit the client needs, e.g. their stage of change.
  - o Present clear and accurate information.
- Create an environment to inspire clients, by injecting personality, and a degree of charisma or showpersonship in each session.

### **5.2 Explain,** demonstrate and embody safe and effective technique

- Explanations and demonstrations that are technically correct, safe, and appropriate to the individual client.
- Demonstrate and embody good body awareness to cover:
  - Principles & fundamentals of Pilates.
  - Understanding of the Pilates method through own physical demonstration.
  - Use of modifications and preparatory exercises.
- Application to:
  - All phases of session preparation, main, closing.
  - All exercises.
  - Based on original Contrology mat exercises (when appropriate).
  - Use of preparatory exercises (when appropriate).
  - Bodyweight exercises.
  - Exercises using small equipment, e.g. small balls, bands, and bricks.
  - Flexibility and range of motion exercise (static and/or dynamic stretching and mobilisation of joints).
  - Stability exercises (trunk, pelvis, scapula).

5.3 Use appropriate instruction and communication methods to support participants' understanding of the exercise purpose and how to perform it	<ul> <li>When delivering group sessions.</li> <li>Demonstration.</li> <li>Verbal cueing.</li> <li>Hands-on assistance/tactile coaching.</li> <li>Visualisation (where appropriate), e.g. imagery.</li> </ul>
<b>5.4 Deliver</b> a safe and effective preparatory phase using appropriate methods and techniques to facilitate desired goals	<ul> <li>Physiological and Pilates goals.</li> <li>Structure, content, and exercise selection according to approach.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.5 Deliver</b> a safe and effective main phase using appropriate methods and techniques to facilitate desired goals	<ul> <li>Physiological and Pilates goals.</li> <li>Structure, content and exercise selection according to approach.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
5.6 Deliver a safe and effective closing phase using appropriate methods and techniques to facilitate desired goals	<ul> <li>Physiological and Pilates goals.</li> <li>Structure, content and exercise selection according to approach.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.7</b> Interact and support different clients	<ul> <li>Use of effective communication skills.</li> <li>Rapport building.</li> <li>Technique advice.</li> <li>Correction.</li> <li>Adaptation.</li> </ul>
<b>5.8 Use</b> effective voice volume, pitch, and projection	Appropriate to the phase of session and environment.
<b>5.9 Provide</b> client specific instructing points, feedback, encouragement, and reinforcement in a	Positive correction – what to do, rather than what not to do.

friendly, professional manner	
<b>5.10 Adopt</b> appropriate teaching positions to observe and monitor participants and respond to their needs	<ul> <li>To monitor the safety and intensity of exercise.</li> <li>To identify the need for alternatives, modifications or progressions.</li> <li>To support and improve performance.</li> </ul>
5.11 Observe participants' movement and correct exercise technique to ensure safe and effective alignment, execution, and use of equipment where appropriate	As above 5.10 and below 5.12.
5.12 Provide adaptations, alternatives, and progressions to meet individual and group needs and improve performance	<ul> <li>Individual and group needs.</li> <li>Adaptations according to observation and needs identified.</li> <li>This may include: <ul> <li>Exclusion of exercises.</li> <li>Inclusion of additional exercises.</li> <li>Modification of exercises.</li> <li>The use of small equipment.</li> <li>Change of start position or other variables, such as lever length or range of motion.</li> </ul> </li> </ul>
5.13 Offer appropriate hands-on assistance and touch correction when relevant	<ul> <li>As a corrective strategy.</li> <li>The importance of gaining permission before using hands-on correction.</li> <li>Consider potential for use in a group setting.</li> <li>Main use in one-to-one work to guide the client towards you and/or something that you are cueing as well as hands on to help them 'feel' and/or benefit from the exercise.</li> </ul>

#### 6. Be able to instruct one-to-one Pilates matwork sessions and programmes

# 6.1 Engage the participant from the outset using effective communication to create a positive, motivating, and empowering environment that supports participation and adherence

- Use appropriate communication techniques to:
  - Introduce oneself.
  - Build rapport.
  - Create a positive customer experience.
  - Suit the client needs, e.g. their stage of change.
  - Present clear and accurate information.
- Create an environment to inspire clients by injecting personality and a degree of charisma in each session.

### **6.2 Explain,** demonstrate and embody safe and effective technique

- Explanations and demonstrations that are technically correct, safe, and appropriate to the individual client.
- Demonstrate and embody good body awareness to cover:
  - Principles & fundamentals of Pilates.
  - Understanding of the Pilates method through own physical demonstration.
  - Use of modifications and preparatory exercises.
- Application to:
  - All phases of session preparation, main, closing.
  - All exercises.
  - Based on original Contrology mat exercises (when appropriate).
  - Use of preparatory exercises (when appropriate).
  - Bodyweight exercises.
  - Exercises using small equipment, e.g. small balls, bands, and bricks.
  - Flexibility and range of motion exercise (static and/or dynamic stretching and mobilisation of joints).
  - Stability exercises (trunk, pelvis, scapula).

6.3 Use appropriate instruction and communication methods to support client's understanding of the exercise purpose and how to perform it	<ul> <li>When delivering one-to-ones.</li> <li>Demonstration.</li> <li>Verbal cueing.</li> <li>Hands-on assistance/tactile coaching.</li> <li>Visualisation (where appropriate), e.g. imagery.</li> </ul>
<b>6.4 Deliver</b> a safe and effective preparatory phase using appropriate methods and techniques to facilitate client's desired goals	<ul> <li>Physiological and Pilates goals.</li> <li>Structure, content, and exercise selection according to approach.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
6.5 Deliver a safe and effective main phase using appropriate methods and techniques to facilitate client's desired goals	<ul> <li>Physiological and Pilates goals.</li> <li>Structure, content, and exercise selection according to approach.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
6.6 Deliver a safe and effective closing phase using appropriate methods and techniques to facilitate clients' desired goals	<ul> <li>Physiological and Pilates goals.</li> <li>Structure, content and exercise selection according to approach.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
6.7 Interact and support the client	<ul> <li>Use of effective communication skills.</li> <li>Rapport building.</li> <li>Technique advice.</li> <li>Correction.</li> <li>Adaptation.</li> </ul>
<b>6.8 Use</b> effective voice volume, pitch, and projection	Appropriate to phase of session and environment.

6.9 Provide client specific instructing points, feedback, encouragement, and reinforcement in a friendly, professional manner	Positive correction – what to do, rather than what not to do.
<b>6.10 Adopt</b> appropriate teaching positions to observe and monitor the client and respond to their needs	<ul> <li>To monitor the safety and intensity of exercise.</li> <li>To identify the need for alternatives, modifications, or progressions.</li> <li>To support and improve performance.</li> </ul>
6.11 Observe the client's movement and correct exercise technique to ensure safe and effective alignment, execution, and use of equipment where appropriate	• See 6.10 and 6.12.
6.12 Provide adaptations, alternatives, and progressions to meet client needs and improve performance	<ul> <li>Adaptations according to observation and needs identified.</li> <li>This may include: <ul> <li>Exclusion of exercises.</li> <li>Inclusion of additional exercises.</li> <li>Modification of exercises.</li> <li>The use of small equipment.</li> <li>Change of start position or other variables, such as lever length or range of motion.</li> </ul> </li> </ul>
6.13 Offer appropriate hands-on assistance and touch correction when relevant	<ul> <li>As a corrective strategy.</li> <li>The importance of gaining permission before using hands-on correction.</li> <li>Use in one-to-one work to guide the client towards you and/or something that you are cueing as well as hands on to help them 'feel' and/or benefit from the exercise.</li> </ul>

#### 7. Be able to monitor and review Pilates matwork sessions and programmes and reflect on practice

- 7.1 Evaluate and appraise the effectiveness of the session to ensure the physical and psychological needs of the individual are being met
- Evaluate and reflect on planned sessions and programmes (group and one-to-one) to ensure the physical and psychological needs of the individual are being met.
- Appraise client's performance in relation to the session.
- Appraise own performance in relation to the session/programme.
- Assess the appropriateness of the session/programme content in relation to the user, group, and environment.
- Carry out regular programme reviews to ascertain how well the session/programme is meeting client needs/progress towards goals, any improvements that can be made to the programme plan etc.
- Signpost clients to other aspects of the facility if they show an interest in other areas/activities, e.g. equipment-based Pilates where appropriate.
- **7.2 Use** review information to make recommendations to improve personal practice
- Propose changes/adaptations to the session/programme based on the appraisal of:
  - own performance
  - o client performance
  - o appropriateness of session content.
- Improve own delivery skills.

### History and fundamentals of the Pilates Reformer (M/651/2027)

#### **Unit aim**

To provide the essential foundation knowledge of the:

- History and origins of the Pilates method and the studio apparatus.
- Purpose and uses of the reformer.
- Fundamentals and principles of Pilates.
- Classical and contemporary approaches to using the Pilates reformer.
- Design features and appropriate set-up and maintenance of the reformer.
- Foundation and intermediate repertoire of exercises.
- The skills to evaluate own performance of Pilates reformer exercises and make recommendations on how to develop own practice.

#### Content

#### 1. Know the history and origins of Pilates and the range of studio apparatus used within the Pilates system

- **1.1 Outline** the history of Pilates and the key people involved in developing the method
- Awareness of timescales for key events.
- Creator Joseph Pilates:
  - Brief overview of his early life and his migration to USA.
  - o His wife Clara and her input into developing the method.
  - His inventions: 'Reformer' (1927), 'Cadillac' (1940s).
     Created to compliment the mat exercises (Contrology) by supporting his clients with springs during their performance.
  - Books: 'Your health' (1934) and 'Return to life through Contrology' (1945).
  - Contrology (original 34 exercises) never patented.
- Joseph's New York Pilates studio and his legacy:
  - Method became known as 'Pilates' after Joseph's death (1967).
  - First generation teachers who trained with Joe directly include Eve Gentry, Kathy Stanford Grant, Carola Trier, Bob Seed, Ron Fletcher, Lolita San Miguel, Bruce King, Mary Bowen, Romana Kryzanowska etc.

- o Romana Kryzanowska, a ballet dancer, was approached by John Howard Steel to take over the running of New York studio after Joseph's death (circa 1967). She created levels, refined exercises and positions, and added additional exercises to the repertoire, including super advanced versions. These have now been incorporated into the 'return to life' programme.
- Second generation teachers trained by first generation teachers include: Moira Merrithew, Rael Isacowitz, Alan Herdman (NB: Alan Herdman was the first instructor to bring Pilates to the UK, circa 1980s and trained many UK instructors).
- Third generation teachers trained by second generation teachers include: Penny Latey, Lynne Robinson, Gordon Thompson, Michael King.
- Awareness of publications and developments of the Pilates elders.
- Awareness of the litigation and court ruling, in October 2000, regarding use of the name 'Pilates' and the role of Ken Endelman, Ron Fletcher & John Howard Steel (Sean Gallagher wanted to trademark the name Pilates). The outcome of the ruling was that 'Pilates' is a descriptive term and a method of exercise, no one can monopolise the method or the generic word used to describe it.
- Pilates includes a whole repertoire of exercises (500+) beyond the Contrology mat exercises.
- Brief overview/awareness of:
  - The development of Pilates in the UK.
  - UK National Occupational Standards (NOS) SkillsActive (2005).
  - o EHFA standards (2014).
  - CIMSPA standards (2023).
  - EMD UK and SPM (2024) scope of practices.
- Different approaches to Pilates may be described as:
  - Contrology original 34 exercises performed as a dynamic flow with a set number of each exercise. Use full set of studio apparatus, e.g. reformer etc to adapt, modify, and support performance towards the mat exercises.
  - Classical/traditional follow original approach more closely, dynamic flow with set repetitions. In USA - west coast and east coast variations.
  - Contemporary closely follow original and sequential flow, with more modifications and use of apparatus to support performance.

- Modern usually slower with exercises modified and different flow.
- Fitness usually more of a body conditioning style approach, higher repetitions of exercises.
- Therapeutic exercises more adapted and modified to work with specific needs.
- Useful references (listed in appendices):
  - Joseph Pilates 'Return to life through Contrology'
  - Joseph Pilates 'Your health'
  - John Howard Steel 'The caged lion. Joseph Pilates and his legacy.'
  - Javier Pérez Pont and Esperanza Romero 'Hubertus Joseph Pilates (A true history of Joseph Pilates).'
  - o Penny Latey 'Modern Pilates'
- The Society for the Pilates method: https://thesocietyforthepilatesmethod.com/history/.

# **1.2 Identify** the 34 original Contrology mat exercises and their relationship to the reformer repertoire

- The 'Contrology' matwork repertoire (original 34 exercises created by Joseph Pilates) are considered the pinnacle of the Pilates system (classical/contemporary) to work towards:
  - The sequence is performed as a flowing sequence transitioning from one exercise to the other without rests and with specific repetitions for each exercise.
  - In Return to Life: Contrology book, Pilates guides to master one exercise before moving on to next.
- Levels of exercises were introduced by Romana Kryzanowska and other elders with some exercises excluded at specific levels.
- The mat exercises are the hardest level of the work and exercises would need to be modified (or excluded) for newcomers and/or deconditioned and for participants with injuries and medical conditions which present contraindications:
  - The full apparatus/equipment can assist and support work towards the mat (additional qualifications required).
  - Mat exercises can be excluded or modified and adapted using a range of methods (including using small equipment, if required).
  - Awareness of mat exercises that appear in the reformer repertoire and similarities and differences, e.g. The Hundred is in both, Jack Knife exists on both, roll over is overhead on the reformer.
- Useful references (listed in appendices):

	<ul> <li>Joseph Pilates – 'Return to life through Contrology'</li> <li>Rael Isacowitz – 'Pilates anatomy'</li> <li>Tracy Ward – 'Science of Pilates.'</li> </ul> <b>NB</b> : Reformer exercises covered in learning outcome (LO3).
<b>1.3 Explain</b> the origins and history of the Pilates reformer	<ul> <li>Probably the most well-known, versatile, and popular pieces of Pilates apparatus.</li> <li>The first piece of studio apparatus created by Joseph Pilates that was patented/copywritten around 1927.</li> <li>The rise in popularity of the reformer in the fitness sector (2020), including group sessions and the advantages and disadvantages of using the reformer when working with groups.</li> <li>See Appendix 2 for examples of reformer exercises.</li> </ul>
1.4 Describe the six main principles of Pilates and their application to the studio reformer repertoire	<ul> <li>Principles introduced by Freidman and Eisen (circa 1980s):         <ul> <li>centering</li> <li>concentration</li> <li>control</li> <li>precision</li> <li>flow</li> <li>breath.</li> </ul> </li> <li>Different schools and instructors have modified or use different terms to describe some principles.</li> <li>Useful references:</li> <li>Phillip Friedman and Gail Eison – 'The Pilates method of physical and mental conditioning.'</li> </ul>
1.5 Identify other studio apparatus and their use within the Pilates system	<ul> <li>Various other studio apparatus created by Joseph Pilates to support performance and work towards the mat exercises (considered the hardest part of the Pilates system).</li> <li>Other apparatus includes:         <ul> <li>Cadillac/trapeze (the last piece of equipment, patented/copywritten in the 1940s).</li> <li>Chairs (classical names – wunda chair, baby chair, high/electric chair). NB: contemporary schools usually have a combined chair (stability chair or similar). The baby chair is not used in most contemporary schools.</li> <li>Barrels (ladder barrel, arc/baby/small barrel, spine corrector).</li> <li>Other equipment:</li> </ul> </li> </ul>

- foot corrector, toe corrector
- neck stretcher
- airplane board (used on the Cadillac leg springs), trapeze bar.
- Ped-o-pull.
- The purpose and uses of using the studio apparatus to complement and support performance and execution of Pilates exercises.
- Purpose and uses of apparatus:
  - May include strength, support, length, proprioception, and feedback, stability.
  - Examples of apparatus exercises that support performance of original exercises.
- The matwork exercises are the pinnacle of the classical or traditional system and a goal for people to work towards, studio apparatus can support work towards the original 34 matwork.
- The classical thought is that if the client is not ready, take them somewhere else in the 'system of exercises' to work on that area prior to performing a particular exercise.

#### 2. Know the fundamental uses and benefits of the reformer

### **2.1 Explain** the purpose and benefits of using the reformer

- Traditionally used for one-to-one work but has evolved into being used for group sessions.
- Physical benefits to include mobility, stability, coordination, improve posture (with consideration to all components of fitness) etc.
- Health benefits, including the improvement of mental health and daily living.
- Link to related anatomy and physiology and body systems knowledge, with consideration to:
  - Function of muscle groups not just action.
  - Awareness of fascia and fascial lines (basic).
  - o Role of thoracolumbar fascia on stability and function.
  - o Cervical, scapula, pelvic stability.
  - Spine mobility and stability.
  - Awareness of current and related research.
- Differences in practice, for example Contrology was originally performed with flat spine, contemporary use neutral spine, other schools use 'aligned' spine.

# **2.2 Outline** the difference between classical and contemporary uses of the reformer

- Group reformer sessions are a contemporary and 'fitness' addition:
  - Some schools split exercises into body sections rather than following original repertoire and flow.
  - Classicists argue this loses the essence of Pilates because the reformer is used like another piece of gym kit
  - Some approaches use increased repetitions and burnout approach which is fitness/gym-based approach.
  - Some group reformer classes include very high participant numbers (15-20) which many Pilates method advocates would not recommend due to safety reasons.
- The sequence of exercises that Joseph used for the reformer were not published, unlike the Contrology mat repertoire, so the exercise order and flow of exercises is likely to be different.

### **2.3 Outline** the main design features of the reformer

- Common design (manufacturer) features of most reformers include:
  - carriage
  - carriage stopper
  - head rest

- o shoulder rests
- foot bar
- springs
- o gear bar
- foot straps; handles and hand straps, and ropes/leather straps
- box and other accessories.
- Awareness of some differences between reformer manufacturer designs:
  - o Size.
  - Springs.
  - The ability or inability to modify the equipment.
  - Materials used.
  - o Cost.
  - Space and storage required.
- Consideration to the advantages and disadvantages of different designs.

#### 2.4 Describe

appropriate set-up and maintenance of the reformer

- The importance of regular cleaning and the substances or cleaning agents to use for different structures and materials.
- General maintenance considerations depend on volume of use:
  - Contemporary companies suggest springs usually need to be replaced every two years.
  - The leather and/or ropes need to be checked regularly for wear and tear and may need length altering due to stretching.
  - Cleaning of the rollers under the carriage to ensure that they are free from oil.
  - Cleaning rails regularly to keep clear of debris.
  - Foot bar covers to be checked for wear and tear.
  - Foot strap check security of the strap and the screws that hold strap in place.
  - Vinyl check for tears.
- Pre-usage checks:
  - o How (and when) to make equipment adjustments.
  - Appropriate spring usage for specific exercises.
  - How to mount and dismount correctly.

3. Know the foundation and intermediate reformer exercise repertoire	
<b>3.1 Identify</b> the full repertoire of exercises that can be practiced using the reformer	<ul> <li>Awareness of full reformer repertoire and all levels.</li> <li>A basic awareness of the whole Pilates system and other apparatus and how the reformer fits within the system.</li> <li>See Appendix 2 for exercise lists.</li> </ul>
<b>3.2 Describe</b> similarities and differences between the reformer and matwork repertoire	<ul> <li>Awareness of exercises that appear in both the reformer and matwork repertoire and their similarities and differences, e.g. 'the Hundred' is in both, 'Jack Knife' exists in both, roll over is overhead on the reformer.</li> </ul>
3.3 Explain the purpose, benefits and contraindications of the foundation and intermediate reformer exercise repertoire	<ul> <li>Basic and intermediate exercises.</li> <li>For health and safety, consideration to: <ul> <li>Repertoire used for group teaching.</li> <li>Repertoire used for one-to-one teaching.</li> <li>The reasons why repertoire would be different in both settings.</li> <li>What is safe in group teaching and what is not.</li> </ul> </li> <li>See Appendix 2 for exercise lists.</li> </ul>
3.4 Explain the correct set-up and execution of movement for all exercises in the foundation and intermediate reformer repertoire	<ul> <li>For all exercises, explain:         <ul> <li>purpose (anatomy, e.g., centre strength, lumbo pelvic stability, spine mobility etc.)</li> <li>start position and set-up</li> <li>springs and repetitions per exercise</li> <li>instructions</li> <li>observation and teaching points</li> <li>modifications and variations</li> <li>visualisation.</li> </ul> </li> </ul>
3.5 Explain how to apply the Pilates principles to the foundation and intermediate reformer repertoire	Application of Pilates principles to all exercises.

#### 4. Be able to practice and evaluate own performance of exercises from the foundation and intermediate reformer repertoire

# **4.1 Practice and evaluate** own performance of the foundation and intermediate exercise repertoire

- Exercise selection specific to school and approach.
- Basic/foundation/beginner and intermediate exercises (as appropriate).
- Use of modifications (as needed).
- Exclusion of exercises (as needed) with reasons for exclusions.

See Appendix 2 for exercise lists.

#### 4.2 Make

recommendations on how to develop own practice

- Modify and adapt exercises.
- Exclude or omit exercises.
- Consider where else in the Pilates system the exercise may be practiced, e.g. other equipment.
- Participation in other instructors' sessions.
- Further training and continuing professional development (CPD).

### Plan, deliver and evaluate Pilates-based reformer sessions (Groups) (R/651/2028)

#### **Unit aim**

To develop the knowledge and skills required to safely and effectively plan, deliver, and evaluate group reformer sessions, within scope of practice.

#### Learners will:

- Screen clients to check readiness to participate.
- Plan and deliver group reformer sessions (6+).
- Evaluate sessions and make recommendations to improve practice.

#### Content

#### 1. Understand how to screen individuals prior to participation in group reformer sessions

# **1.1 Explain** the importance of appropriate pre-activity screening prior to participation

- With consideration to practicability of methods that can be used in group sessions.
- Screening methods and risk stratification models:
  - o PAR-Q+ with follow-on questions.
  - Verbal screening prior to participation and how to conduct it.
  - Other assessments (see 1.3).
- Purpose of screening:
  - Appropriate advice and guidance.
  - Reasons for deferral, signposting, and referral.
  - Working within scope of practice and role boundaries, competence, confidence, and qualifications.
  - Identifying suitability of sessions and identifying individuals who need specialist support.
  - Determining session content and exercise selection.
  - Supporting individuals with lifestyle behaviour change.
- How to conduct screening:
  - Build rapport.
  - o Connect with people to create a positive experience.
  - Adapt communication style to suit client needs.

1.2 Summarise the information that should be obtained when prescreening individuals prior to participation  1.3 Explain when to signpost or refer participants to other healthcare	<ul> <li>Health screening and readiness to participate.</li> <li>Health status and reasons for deferral or exclusion.</li> <li>Experience attending Pilates and reformer sessions.</li> <li>Postural assessment (informal observation).</li> <li>Previous and current physical activity levels.</li> <li>Contraindications present.</li> <li>Needs that may exceed scope of practice/qualifications, e.g., perinatal.</li> </ul>
professionals prior to	Other professionals may include:
participation	o dieticians
	<ul><li>counsellors</li><li>GPs</li></ul>
	<ul><li>○ GPs</li><li>○ physiotherapists</li></ul>
	<ul><li>o osteopaths</li></ul>
	o other exercise or Pilates instructors.
1.4 Outline potential goals for those attending group reformer sessions and the importance of regular participation to support these goals	<ul> <li>How to set relative goals linked to individual needs, wants, and motivators.</li> <li>Example goals may include: <ul> <li>Improve posture.</li> <li>Scapular stability.</li> <li>Pelvic stability.</li> <li>Trunk stability.</li> <li>Spine mobility.</li> <li>Shoulder and hip mobility.</li> <li>Strength.</li> <li>Progression towards more advanced exercises.</li> </ul> </li> </ul>
1.5 Describe how to record and store information	<ul> <li>Records to be:</li> <li>clear and structured</li> <li>use an appropriate format.</li> <li>Purpose:</li> <li>To maintain a record of work.</li> <li>For monitoring purposes, e.g. progression.</li> </ul>
	<ul> <li>Evidence, in the event of litigation.</li> </ul>
	<ul> <li>Storage and use to align with GDPR and Data Protection guidelines.</li> </ul>

#### 2. Understand how to plan, design, and deliver reformer sessions for groups **2.1 Describe** planning Essential considerations when planning and delivering group considerations for Pilates sessions and programmes. delivering reformer How to safely prepare activity areas for use and how to safely sessions for groups set-up and store equipment. Legalities relating to the use of music and the selection of appropriate music (if used). 2.2 Describe how to Screening of individuals and checks to clothing and attire etc. assess and manage Equipment checks. risks in the group Environment checks. reformer environment 2.3 Outline how to • Three phases of session: structure a group preparatory reformer session o main o closing. Provision of adaptations, progressions, and regressions for each exercise included in the session/programme, including knowing when to omit or include exercises to meet participants' needs. • Importance of sequencing, flow, and transition between exercises. The importance of muscle balance when planning group sessions. How to programme exercise to develop: Mobility Stability Strength and flexibility exercises Movement patterns to accommodate the activities of daily living. How to sequence a group class including: breaking down exercises layering transitions between exercises. 2.4 Explain appropriate Structure and content to prepare for activities in main phase. and relevant movement Appropriate for specific session and group needs. for the preparatory Safety and effectiveness. phase of a group reformer session

#### 2.5 Explain how to How to select exercises and sequence a group class, with consideration to flow and transition from one exercise to structure the main another including teaching position, breaking down exercises, phase of a group layering, transitions between exercises when working with reformer session mixed abilities. • Exercises to exclude in a group setting, such as (but not exclusive to): Standing work without three points of support. Kneeling work without three points of support/contact. Head stands. Many advanced exercises. 2.6 Explain appropriate • Content to relate to activities used in main phase and support and relevant movement the closing of the session. and flexibility work for Appropriate for specific session and group needs. the closing phase of a Safety and effectiveness. group reformer session **2.7 Identify** a range of Modifications may include: exercise modifications Different exercise from the series. and adaptations Different spring tension setting. Use of long box or short box. Use a preparatory exercise. Use an exercise earlier in the series, e.g. need to be able to do 'the Hundred' before 'overhead.' Isolating components of the full movement Adapting the flow and sequence Exclusion of specific exercises (as appropriate to participant needs) 2.8 Explain the In group a setting. importance of correct To support development of safe and effective and embodied instructions and exercise technique. demonstration of safe To ensure safe and effective practice. and effective exercise • To support clients towards independent practice. technique 2.9 Describe how to In group a setting. utilise and adapt Effective tailoring of coaching/teaching/instructing methods. communication and • The most appropriate communication methods when instructional skills to delivering group classes. monitor, improve, and correct performance Methods – demonstration, verbal cueing, hands-on assistance/tactile coaching, visualisation e.g., imagery.

	When to offer hands-on assistance/touch correction and when not to.
2.10 Summarise the benefits and limitations of different methods of monitoring exercise effectiveness or intensity	<ul> <li>In group setting.</li> <li>Observation during session.</li> <li>Observation of movement assessment and technique over a period of time.</li> <li>Communication during exercise, e.g. question and answer and client feedback.</li> </ul>

3. Understand how to monitor and review group reformer sessions and reflect on practice	
3.1 Explain the importance of regular reviews of the participant's progress	<ul> <li>To ascertain how well the session and/or programme is meeting client needs/progress towards goals.</li> <li>To identify any improvements that can be made to the programme plan etc.</li> </ul>
3.2 Identify opportunities to collect feedback from participants	<ul> <li>Methods of evaluating how well Pilates based reformer sessions and programmes are meeting the client needs:         <ul> <li>Before, during, and after sessions.</li> <li>Verbal feedback and discussion.</li> <li>Written questionnaires and surveys.</li> <li>Electronic questionnaires and surveys, e.g. survey monkey.</li> </ul> </li> </ul>
3.3 Explain how to use the information gathered from participant feedback to promote motivation, adherence, and outcome success	<ul> <li>Monitor and review the effectiveness of the Pilates based reformer sessions and programmes.</li> <li>Support future planning and delivery for individuals and groups.</li> </ul>
<b>3.4 Outline</b> how to reflect on your own practice to inform future sessions	<ul> <li>Kolb model.</li> <li>Importance of reflective practice.</li> <li>Use of feedback from participants.</li> <li>Consideration to session content, structure, instructional and communication skills, safety, effectiveness, inclusivity etc.</li> <li>Use of reflective practice to identify CPD needs.</li> </ul>

#### 4. Be able to plan and prepare for group reformer sessions **4.1** Collect and record Use of appropriate health screening and risk stratification for information from group reformer sessions. participants to inform session structure 4.2 Assess and • Prepare self, the environment, and equipment as appropriate to the session. manage risks in the group studio reformer Carry out relevant risk assessments showing appropriate environment safety considerations for the environment. 4.3 Screen participants Verbal and written screening (PAR-Q+). and use information to · Advice according to needs, including signposting, deferral or provide credible advice exclusion (where appropriate), e.g. needs exceed scope, and guidance contraindications present. **4.4 Provide** instruction Reformer and box. on how to set-up the Mount, dismount, and exercise transitions. reformer and other Spring usage and adaptation. equipment safely • Other maintenance checks prior to use. Consideration to the use of induction sessions when working with groups. 4.5 Analyse and use All phases to be appropriate to group needs. information gathered Modification of planned exercises according to needs. from participants to Appropriate exercise selection for all phases. design a safe and • Appropriate session structure – preparatory, main, and effective group reformer closing phase. session • Exercises selected from the foundation and intermediate repertoire. • Specific exercise selection to be appropriate for group needs, ability, and experience. 4.6 Provide a rationale Rationale and reasons for exercise selection and inclusion, for the exercises used such as: in the session The number of exercises included. Exercises excluded and why. Any exercises modified and why. How the modifications will support progression.

<b>4.7 Apply</b> the Pilates principles to all phases of the session	Plan all phases in line with the Pilates principles and fundamentals.
4.8 Provide suitable adaptations including progressions and regressions for all exercises	<ul> <li>Adaptations and progressions to meet the needs of participants and be appropriate for a group setting.</li> <li>Amend session/programme content to meet the needs of individuals and the environment.</li> <li>See example exercise lists and variations in Appendix 2.</li> </ul>
<b>4.9 Record</b> session plans in an appropriate format	<ul> <li>Accurate and current records.</li> <li>Use of appropriate format.</li> <li>Appropriate storage and use (GDPR and data protection).</li> </ul>

5. Be able to instruct reformer sessions to groups		
<b>5.1 Engage</b> participants from the outset using effective communication to create a motivating, and empowering environment	<ul> <li>Use a range of effective communication techniques to create a positive motivating and empowering environment that supports participation and adherence.</li> <li>Create a client centred environment.</li> </ul>	
<b>5.2 Explain,</b> demonstrate, and embody safe and effective technique	<ul> <li>Explanations that are technically correct, safe, and appropriate to the individual client.</li> <li>Demonstrate and embody good body awareness.</li> <li>Application to: <ul> <li>all phases of session – preparation, main, closing</li> <li>all exercises.</li> </ul> </li> </ul>	
5.3 Use appropriate instruction and communication methods to support participants understanding of the exercise purpose and how to perform it	<ul> <li>When delivering group sessions.</li> <li>Clear instruction and use of teaching position.</li> <li>Verbal cueing.</li> <li>Hands-on assistance/tactile coaching.</li> <li>Visualisation (where appropriate), e.g. imagery.</li> </ul>	

<b>5.4 Deliver</b> a safe and effective preparatory phase using appropriate methods and techniques to meet group needs	<ul> <li>Appropriate for group setting.</li> <li>Structure, content, and exercise selection according to Pilates method approach and the reformer system repertoire.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.5 Deliver</b> a safe and effective main phase using appropriate methods and techniques to meet group needs	<ul> <li>Appropriate for group setting.</li> <li>Structure, content, and exercise selection according to Pilates method approach and the reformer system repertoire.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.6 Deliver</b> a safe and effective closing phase using appropriate methods and techniques to meet group needs	<ul> <li>Appropriate for group setting.</li> <li>Structure, content, and exercise selection according to Pilates method approach and the reformer system repertoire.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.7</b> Interact and support different clients	<ul> <li>Appropriate for group setting.</li> <li>Use of effective communication and instructional skills.</li> </ul>
<b>5.8 Use</b> effective voice volume, pitch, and projection	<ul><li>Appropriate for group setting.</li><li>Appropriate to phase of session and environment.</li></ul>
5.9 Provide client specific instructing points, feedback, encouragement, and reinforcement in a friendly, professional manner	<ul> <li>Appropriate methods and skills for group setting.</li> <li>Positive correction – what to do, rather than what not to do.</li> <li>Ability to correct quickly to ensure safety.</li> </ul>
<b>5.10 Adopt</b> appropriate teaching positions to observe and monitor participants and respond to their needs	<ul> <li>Appropriate for group setting.</li> <li>To monitor the safety and intensity of exercise.</li> <li>To identify the need for alternatives, modifications or progressions.</li> <li>To support and improve performance.</li> </ul>
<b>5.11 Observe</b> client's movement and correct exercise technique to	<ul><li>Appropriate for group setting.</li><li>See 5.10 and 5.12.</li></ul>

ensure safe and effective alignment, execution, and use of equipment where appropriate	Including the use of hands-on assistance and touch correction when relevant and practicable.
5.12 Provide adaptations, alternatives, and progressions to meet individual needs and improve performance	<ul> <li>Adaptations according to observation and needs identified.</li> <li>This may include:         <ul> <li>exclusion of exercises</li> <li>modification and adaptation of exercises.</li> </ul> </li> </ul>

#### 6. Be able to monitor and review group reformer sessions and reflect on practice

# 6.1 Evaluate and appraise the effectiveness of the session to ensure group needs are met

- Evaluate and reflect on planned sessions to ensure the physical and psychological needs of the individuals and group are being met.
- Appraise group and individual participant performance.
- Appraise own performance.
- Assess the appropriateness of the session/programme content in relation to the user, group, and environment.
- Carry out regular programme reviews to ascertain how well the session/programme is meeting client needs/progress towards goals, any improvements that can be made to the programme plan etc.

# **6.2 Use** review information to make recommendations to improve personal practice

- Propose changes/adaptations to the session/programme based on the appraisal of:
  - o own performance
  - client performance
  - o appropriateness of session content.
- Improve own delivery skills.
- Improve session and programme design.

# Plan, deliver and evaluate Pilates reformer sessions and programmes (One-to-One) (T/651/2029)

#### **Unit aim**

To develop the knowledge and skills required to safely and effectively plan, deliver, and evaluate bespoke Pilates reformer sessions and programmes to individual clients within scope of practice.

#### Learners will:

- Screen and consult with clients to check readiness to participate.
- Plan and deliver bespoke reformer sessions and programmes for one-to-one clients.
- Evaluate programmes and make recommendations to improve practice.

#### Content

#### 1. Understand how to screen and assess individuals prior to participation in Pilates reformer sessions or programmes

1.1 Explain the importance of appropriate consultation, pre-activity screening and assessment of client(s) prior to participation

- To support one-to-one client work, goal planning, exercise selection and progression.
- Screening methods and risk stratification models to use:
  - ACSM model algorithm and current PAR-Q+ with follow-on questions.
  - Verbal screening prior to participation and how to conduct it.
  - Other assessments (see 1.3).
- Purpose of screening:
  - Appropriate advice and guidance.
  - Reasons for deferral, signposting, and referral.
  - Working within scope of practice and role boundaries, competence, confidence, and qualifications.
  - Identifying suitability of sessions and identifying individuals who need specialist support.
  - Determining session content and exercise selection.
  - o Supporting individuals with lifestyle behaviour change.
- How to conduct:

1.2 Describe appropriate consultation and communication techniques to support bespoke programming	<ul> <li>Build rapport.</li> <li>Connect with people to create a positive experience.</li> <li>Adapt communication style to suit client needs.</li> <li>Present accurate information, e.g., sensitivity, discretion, non-judgmental manner, respect the individuality of the client, language and terms understood by client/simplify technical information, etc).</li> <li>How to conduct a consultation with one-to-one clients – environment, timing, structure etc.</li> <li>The importance of rapport and relationship established between instructor and client during the consultation on engagement and adherence.</li> <li>Different communication techniques and how/when to use them in a consultation:         <ul> <li>observation/non-verbal techniques/body language</li> <li>open/closed questioning</li> <li>motivational interviewing</li> <li>dealing with resistance to change</li> <li>reflective statements</li> <li>paraphrasing</li> <li>summarising</li> <li>active listening.</li> </ul> </li> </ul>
1.3 Summarise the information that should be obtained when consulting with, and pre-screening individuals prior to participation	<ul> <li>As appropriate to one-to-one client work.</li> <li>Health screening and readiness to participate.</li> <li>Health status and reasons for deferral or exclusion.</li> <li>Experience attending Pilates.</li> <li>Postural assessment.</li> <li>Previous and current physical activity levels.</li> <li>Lifestyle information, e.g. eating behaviour, habits, occupation (desk-based or active).</li> </ul>
1.4 Explain when to signpost or refer clients to other healthcare professionals prior to participation	<ul> <li>Contraindications present.</li> <li>Needs that may exceed scope of practice/qualifications, e.g. perinatal.</li> <li>Other professionals may include:         <ul> <li>dieticians</li> <li>counsellors</li> <li>GPs</li> </ul> </li> </ul>

	<ul><li>physiotherapists</li><li>osteopaths</li></ul>
	o other exercise or Pilates instructors.
1.5 Outline potential goals for clients attending one-to-one reformer sessions and the importance of regular participation to support these goals	<ul> <li>How to set relative goals linked to individual needs, wants, and motivators.</li> <li>Example goals may include: <ul> <li>Improve posture.</li> <li>Scapular stability.</li> <li>Pelvic stability.</li> <li>Trunk stability.</li> <li>Spine mobility.</li> <li>Shoulder and hip mobility.</li> <li>Strength.</li> <li>Progression towards more advanced exercises.</li> </ul> </li> </ul>
1.6 Describe how to record and store information	<ul> <li>Records to be:</li> <li>clear and structured</li> <li>use an appropriate format.</li> <li>Purpose:</li> <li>To maintain a record of work.</li> <li>For monitoring purposes, e.g. progression.</li> <li>Evidence, in the event of litigation.</li> <li>Storage and use to align with GDPR and data protection guidelines.</li> </ul>

#### 2. Understand how to plan, design, and deliver Pilates reformer sessions and programmes to meet client needs

- **2.1 Describe** planning considerations for delivering Pilates reformer sessions and programmes
- Essential considerations when planning and delivering one-toone Pilates sessions and programmes.
- How to safely prepare activity areas for use and how to safely set-up and store equipment.
- Legalities relating to the use of music and the selection of appropriate music (if used).
- **2.2 Describe** how to assess and manage risks in the Pilates reformer environment
- Screening of individuals, experience of working with reformer and checks to clothing and attire etc.
- Equipment checks.
- Environment checks.
- **2.3 Outline** how to structure a one-to-one Pilates reformer session
- Three phases of session:
  - preparatory
  - o main
  - o closing.
- Provision of adaptations, progressions, and regressions for each exercise included in the session/programme, including knowing when to omit or include to support the client's progress.
- Importance of sequencing, flow, and transition between exercises.
- The importance of muscle balance when planning sessions/programmes (especially group sessions).
- How to programme exercise to develop:
  - Mobility.
  - Stability.
  - Strength and flexibility exercises.
  - Movement patterns to accommodate activities of daily living.
- How to sequence a one-to-one session including:
  - breaking down exercises
  - layering
  - transitions between exercises.

2.4 Explain how to structure the preparatory phase of a one-to-one Pilates reformer session to meet client needs	<ul> <li>Appropriate and relevant movement patterns</li> <li>Content to prepare for activities in main phase.</li> <li>Appropriate for specific session and client needs.</li> </ul>	
2.5 Explain how to structure the main phase of a one-to-one Pilates reformer session to meet client needs	<ul> <li>How to sequence and select exercises for one-one sessions including breaking down exercises, layering, flow and transition from one exercise to another including teaching position.</li> <li>Exercise selection to be based on experience and ability of participant/client.</li> <li>Exercises to exclude in a small group setting.</li> </ul>	
<ul><li>2.6 Explain how to structure the closing phase of a one-to-one Pilates reformer session to meet client needs</li><li>2.7 Identify a range of</li></ul>	<ul> <li>Appropriate, relevant movement patterns and flexibility work.</li> <li>Content to relate to activities used in main phase and support closing of session.</li> <li>Appropriate for specific session and client needs.</li> </ul>	
exercise modifications and adaptations	<ul> <li>Modifications may include:</li> <li>Different exercise from the series.</li> <li>Different spring tension setting.</li> <li>Use of long box or short box.</li> <li>Use of a preparatory exercise.</li> <li>Use an exercise earlier in the series, e.g. need to be able to do 'the hundred' before overhead.</li> <li>Isolating components of the full movement.</li> <li>Adapting the flow and sequence.</li> <li>Exclusion of specific exercises (as appropriate to Participant needs).</li> </ul>	
2.8 Explain the importance of correct instructions and	<ul> <li>To support development of safe and effective and embodied exercise technique.</li> <li>To ensure safe and effective practice.</li> </ul>	

demonstration of safe and effective exercise technique	To support clients towards independent practice.
2.9 Describe how to utilise and adapt communication and instructional skills to monitor, improve, and correct performance	<ul> <li>Effective tailoring of coaching/teaching/instructing methods.</li> <li>Methods – demonstration, verbal cueing, hands-on assistance/tactile coaching, visualisation, e.g. imagery.</li> <li>When to offer hands-on assistance/touch correction and when not to.</li> </ul>
2.10 Summarise the benefits and limitations of different methods of monitoring exercise effectiveness or intensity	<ul> <li>Observation during session.</li> <li>Observation of movement assessment and technique over a period of time.</li> <li>Communication during exercise, e.g. question and answer and client feedback.</li> </ul>

3. Understand how to m programmes	onitor and review Pilates reformer sessions and
<b>3.1</b> Explain the importance of regular reviews of the participant's progress	<ul> <li>To ascertain how well the session and/or programme is meeting client needs/progress towards goals.</li> <li>To identify any improvements that can be made to the programme plan etc.</li> </ul>
3.2 Identify opportunities to collect feedback from participants	<ul> <li>Methods of evaluating how well Pilates based reformer sessions and programmes are meeting the client needs:         <ul> <li>Before, during, and after sessions.</li> <li>Verbal feedback and discussion.</li> <li>Written questionnaires and surveys.</li> <li>Electronic questionnaires and surveys, e.g. survey monkey.</li> </ul> </li> </ul>
3.3 Explain how to use the information gathered from participant feedback to promote motivation, adherence, and outcome success	<ul> <li>Monitor and review the effectiveness of the Pilates based reformer sessions and programmes.</li> <li>Support future planning and delivery for individuals and groups.</li> </ul>

# **3.4 Outline** how to reflect on your own practice to inform future sessions

- Kolb model.
- Importance of reflective practice.
- · Use of feedback from participants.
- Consideration to session content, structure, instructional and communication skills, safety, effectiveness, inclusivity etc.
- Use of reflective practice to identify CPD needs.

## 4. Be able to plan and prepare for one-to-one Pilates reformer sessions and programmes

# **4.1** Collect and record information from clients to inform session structure, programme objectives and goal setting

- Health screening and risk stratification.
- Posture.
- Support the client to recognise and develop their intrinsic and extrinsic motivation to exercise.
- Set relative goals linked to individual needs, wants and motivators.

# **4.2 Assess** and manage risks in the reformer exercise environment

- Prepare self, the environment, and equipment as appropriate to the session.
- Carry out relevant risk assessments showing appropriate safety considerations for the environment.
- **4.3 Screen** the client and use information to provide credible advice and guidance
- Verbal and written screening (PAR-Q+).

# **4.4 Provide** instruction on how to set-up and use the reformer and other equipment safely

- Reformer and box.
- Mount, dismount and exercise transitions.
- Spring usage and adaptation.
- Other maintenance checks prior to use.
- 4.5 Analyse and use information gathered to design a safe and effective Pilates reformer session and programme
- Single sessions and progressive programmes.
- All phases to be appropriate to individual needs.
- Preparatory, main and closing phase
- Monitor targets, review and evaluate progress adapt accordingly.

<b>4.6 Provide</b> a rationale for the exercises used in the session and programme	<ul> <li>Single sessions and progressive programmes.</li> <li>Rationale and reasons for exercise selection and inclusion, such as:         <ul> <li>Number of exercises included.</li> <li>Exercises excluded and why.</li> <li>Any exercises modified and why.</li> </ul> </li> </ul>	
	<ul> <li>How modifications support progression.</li> </ul>	
<b>4.7 Apply</b> the Pilates principles to all phases of the session	<ul> <li>Single sessions and progressive programmes.</li> <li>Plan all phases in line with the Pilates principles and fundamentals.</li> </ul>	
4.8 Provide suitable adaptations including progressions and regressions for all exercises (where necessary)	Amend session/programme content to meet the needs of individuals and the environment.  See example exercise lists and variations in Appendix 2.	
<b>4.9 Record</b> session and programme plans in an appropriate format	Single sessions and progressive programmes.  Accurate and current records.  Use of appropriate format.  Appropriate storage and use (GDPR and data protection).	

5. Be able to instruct one-to-one Pilates reformer sessions and programmes			
<b>5.1 Engage</b> the participant(s) from the outset using effective communication to create a motivating, and empowering environment	<ul> <li>Use a range of effective communication techniques to create a positive motivating and empowering environment that supports participation and adherence.</li> <li>Create a client centred environment.</li> </ul>		
<b>5.2 Explain,</b> demonstrate and embody safe and effective technique	<ul> <li>Use explanations that are technically correct, safe, and appropriate to the individual client.</li> <li>Demonstrate embodied awareness of each exercise.</li> <li>Application to:         <ul> <li>All phases of session – preparation, main, closing</li> <li>All exercises</li> </ul> </li> </ul>		

5.3 Use appropriate instruction and communication methods to support client's understanding of the exercise purpose and how to perform it	<ul> <li>Clear instruction and use of teaching position</li> <li>Verbal cueing</li> <li>Hands-on assistance/tactile coaching</li> <li>Visualisation (where appropriate) e.g., imagery</li> </ul>
<b>5.4 Deliver</b> a safe and effective preparatory phase using appropriate methods and techniques to facilitate clients' desired goals	<ul> <li>Specific to client needs and goals.</li> <li>Structure, content and exercise selection according to Pilates method approach and the reformer system repertoire.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.5 Deliver</b> a safe and effective main phase using appropriate methods and techniques to facilitate clients' desired goals	<ul> <li>Specific to client needs and goals.</li> <li>Structure, content and exercise selection according to Pilates method approach and the reformer system repertoire.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
5.6 Deliver a safe and effective closing phase using appropriate methods and techniques to facilitate clients' desired goals	<ul> <li>Specific to client needs and goals.</li> <li>Structure, content and exercise selection according to Pilates method approach and the reformer system repertoire.</li> <li>Application of appropriate communication and instructional approaches.</li> </ul>
<b>5.7</b> Interact and support the client(s)	Use of effective communication and instructional skills
<b>5.8 Use</b> effective voice volume, pitch, and projection	Appropriate to phase of session and environment.
<b>5.9 Provide</b> client specific instructing points, feedback, encouragement, and reinforcement	<ul> <li>In a friendly, professional manner.</li> <li>Positive correction – what to do, rather than what not to do.</li> <li>Ability to correct quickly to ensure safety.</li> </ul>
<b>5.10 Adopt</b> appropriate teaching positions to observe and monitor the	<ul> <li>To monitor the safety and intensity of exercise.</li> <li>To identify the need for alternatives, modifications or progressions.</li> <li>To support and improve performance.</li> </ul>

participant(s) and respond to their needs	
5.11 Observe client's movement and correct exercise technique to ensure safe and effective alignment, execution, and use of equipment where appropriate	• See 6.10 and 6.12.
5.12 Provide adaptations, alternatives, and progressions to meet individual needs and improve performance	<ul> <li>Adaptations according to observation and needs identified.</li> <li>This may include:         <ul> <li>Exclusion of exercises.</li> <li>Modification and adaptation of exercises.</li> </ul> </li> </ul>
5.13 Offer appropriate hands-on assistance and touch correction when relevant	<ul> <li>As a corrective strategy.</li> <li>The importance of gaining permission before using hands-on correction.</li> <li>Use in one-to-one work to guide the client towards you and/or something that you are cueing as well as hands on to help them 'feel' and/or benefit from the exercise.</li> </ul>

### 6. Be able to monitor and review Pilates reformer sessions and programmes and reflect on practice

- 6.1 Evaluate and appraise the effectiveness of the session to ensure the physical and psychological needs of the individual are being met
- Evaluate and reflect on planned sessions and programmes to ensure the physical and psychological needs of the individual are being met.
- Appraise client's performance.
- Appraise own performance.
- Assess the appropriateness of the session/programme content in relation to the user, group, and environment.
- Carry out regular programme reviews to ascertain how well the session/programme is meeting client needs/progress towards goals, any improvements that can be made to the programme plan etc.
- **6.2 Use** review information to make recommendations to improve personal practice
- Propose changes/adaptations to the session/programme based on the appraisal of:
  - o own performance
  - o client performance
  - o appropriateness of session content.
- Improve own delivery skills.
- Improve session and programme design.

# The advanced reformer repertoire (D/651/2030)

This unit forms part of the YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire qualification (610/4343/6). It can also be taken as an award in its own right.

It is only recommended for learners who have completed a level 3 matwork qualification prior to their reformer qualification and who are working with clients on a one-to-one basis.

#### **Unit aim**

To provide the essential foundation knowledge of:

- The advanced repertoire of exercises.
- The skills to evaluate own practice of exercises from the advanced repertoire.
- The skills to instruct and evaluate exercises from the advanced repertoire.

#### Content

1. Know the advanced r	eformer exercise repertoire		
1.1 Identify the full repertoire of exercises that can be performed and practiced using the reformer	<ul> <li>Awareness of full reformer repertoire and all levels.</li> <li>The exercises appropriate and not appropriate for different settings (group and one-to-one).</li> <li>A basic awareness of the whole Pilates system and how the reformer fits within the system.</li> <li>See Appendix 2.</li> </ul>		
1.2 Explain the purpose, benefits, and contraindications of the advanced reformer exercise repertoire	<ul> <li>Consider skills, experience, and body awareness required to practice and instruct the advanced repertoire.</li> <li>Advanced repertoire only recommended in one-to-one settings and with experienced clients.</li> <li>Exercises not recommended for group settings and the reasons why.</li> <li>See Appendix 2.</li> </ul>		
1.3 Explain the correct set-up, execution of movement, and use of the Pilates principles to enhance performance of exercises from the advanced repertoire	<ul> <li>For all exercises, explain:</li> <li>purpose of exercise</li> <li>start position and set-up</li> <li>springs and repetitions</li> <li>instructions</li> <li>observation and teaching points</li> </ul>		

0	modifications and variations
0	visualisation
0	Pilates principles application.

## 2. Be able to practice and evaluate own performance of exercises from the advanced reformer repertoire

# **2.1 Evaluate** own practice of exercises from the advanced exercise repertoire

- School and approach specific.
- Advanced exercises (as appropriate).
- Exercises to prepare and build towards the advanced exercises.
- When to exclude and omit exercises.
- · How to modify and adapt exercises.
- See Appendix 2.

# **2.2 Make** recommendations on how to develop own practice

- Modify and adapt.
- Exclude or omit exercises.
- With consideration to where else in the Pilates system the exercise may be practiced e.g., other equipment, and the benefits of fully comprehensive Pilates certification to enable this.

#### 3. Be able to instruct and evaluate exercises from the advanced reformer repertoire

# **3.1 Instruct** exercises from the advanced exercise repertoire safely and effectively

- Exercise selection based on school and approach.
- Advanced exercises (as appropriate to participants needs).
- Exercises to prepare and build towards the advanced exercises.
- When to exclude and omit exercises.
- · How to modify and adapt exercises.
- See Appendix 2.

# 3.2 Make recommendations on how to develop own instructional skills to support client performance of the advanced exercise repertoire

- Improving visual or verbal instructional skills.
- Layering of information etc.

### Appendix 1: Pilates method matwork exercises

#### Please note, 'the following content is offered as a guide only':

- Contrology (the original 34 exercises). Return to life was a whole workout, a dynamic and choreographed flow, with the studio apparatus (reformer etc.) used to modify exercises according to individual needs. Joseph did not have levels but did modify exercises for individuals. In his 'Return to life through Contrology' book, Joseph Pilates suggests master one exercise before moving on to the next.
- Romana Kryzanowska broke the exercises down into levels basic (B), intermediate (I), advanced (A) and added her own additional exercises.
- Other Pilates 'elders' the first, second, and third generation instructors (and others) have also introduced levels and excluded/modified exercises in their published work (see references).
- Contemporary and modern approaches offer a broader range of modifications and variations to the mat repertoire. Adaptations and modifications may include:
  - Changes to lever length.
  - Isolating body parts or components of the full movement.
  - Changing start position.
  - Modifying range of motion.
  - o Using small equipment, e.g. bands or blocks.
  - Excluding some exercises.
  - Adapting the flow and sequence.

are examples, it  1. Hundred 2. Roll-up 3. Roll-over 3. Roll-over 4. One-leg circle 5. Rolling like a ball 6. Single-leg stretch 7. Double-leg stretch (B) 8. Spine stretch forward 9. Open leg rocker 10. Corkscrew 11. Spine stretch forward (B) 12. Swan dive 13. Single (one) leg kick 14. Double-leg kick 15. Neck pull 16. Scissors in air 17. Bicycle in air 18. Shoulder bridge 19. Spine twist 20. Jack knife 21. Side kick 22. Teaser 1 23. Hip twist (circles) 22. Eacy pull front 22. Roll-up (B) 23. Roll-over (A) 44. One-leg circle (B) 55. Rolling like a ball (B) 66. Single-leg stretch (B) 77. Double-leg stretch (B) 78. Rolling like a ball (B) 69. Single-leg stretch (B) 70. Double-leg stretch (B) 70. Double-leg stretch (B) 70. Double-leg stretch (B) 71. Double-leg stretch (B) 72. Double straight leg (Romana's) 73. Single (Romana's) (II) 74. Solling bridge 75. Rolling like a ball (B) 76. Scissors (single straight leg) (Romana's) 77. Bicycle in air 78. Shoulder bridge 79. Neck pull (II) 79. Single (one) leg kick (I) 79. Neck pull (II) 70. Solling bridge 70. Toe dips 70. Toe d	Mat Exercises and Order of Flow			
1. Hundred (B) 2. Roll-up 3. Roll-over 4. One-leg circle 5. Rolling like a ball 6. Single-leg stretch 7. Double-leg stretch (B) 8. Spine stretch forward 9. Open leg rocker 10. Corkscrew 11. Saw 10. Criss cross (obliques) (Romana's) (I) 11. Saw 12. Open leg rocker (I) 13. Single (one) leg kick 14. Double-leg kick 15. Neck pull 16. Scissors in air 17. Bicycle in air 18. Shoulder bridge 19. Spine twist 20. Jack knife 21. Side kick 22. Teaser 1 23. Shoulder bridge (A) 24. Spine stretch 25. Rolling like a ball (B) 6 . Abdominal c 6 . Abdomin	Modifications  NB: The exercise modifications listed he are examples, the list is not exhaustive.			
26 Leg pull 25 Jack knife (I) • Saw.	Supine  Ab prep  Abdominal curl  ½ Roll-up  Reverse curl  Heel lifts  Leg/knee floats  Leg slides  Bridge variations  Rolling bridge  Open door  Hip open  Twist.  Tabletop  Toe dips  Leg extension  Twist  Bicycle  Scissor.  Seated  ½ Roll back  Spine twist  Lateral flexion/mermaid  Spine stretch	2. Roll-p (B) 3. Roll-over (A) 4. One-leg circle (B) 5. Rolling like a ball (B) 6. Single-leg stretch (B) 7. Double-leg stretch (B) 8. Scissors (single straight leg) (Romana's) (I) 9. Double straight leg (Romana's) (I) 10. Criss cross (obliques) (Romana's) (I) 11. Spine stretch forward (B) 12. Open leg rocker (I) 13. Corkscrew (I) 14. Saw (I) 15. Neck roll (Romana's) (I) 16. Swan dive (A) 17. Single (one) leg kick (I) 18. Double-leg kick (I) see * 19. Neck pull (I) 20. Thigh stretch – later addition (B) 21. Scissors in air (A) 22. Bicycle in air (A)	<ol> <li>Roll-over</li> <li>One-leg circle</li> <li>Rolling like a ball</li> <li>Single-leg stretch</li> <li>Double-leg stretch</li> <li>Spine stretch forward</li> <li>Open leg rocker</li> <li>Corkscrew</li> <li>Swan dive</li> <li>Single (one) leg kick</li> <li>Double-leg kick</li> <li>Neck pull</li> <li>Scissors in air</li> <li>Bicycle in air</li> <li>Shoulder bridge</li> <li>Spine twist</li> <li>Jack knife</li> <li>Side kick</li> <li>Teaser 1</li> <li>Hip twist (circles)</li> </ol>	

#### **Mat Exercises and Order of Flow**

- 27. Side kick kneeling
- 28. Side bend
- 29. Boomerang
- 30. Seal
- 31. Crab
- 32. Rocking
- 33. Control balance
- 34. Push-up.

- 26. Side kick (I)
- 27. Side kick series (Romana's) (I)
- 28. Teaser 1 (I)
- 29. Teaser 2, 3, 4 (Romana's) (A)
- 30. Hip twist (circles) (I)
- 31. Swimming (I)
- 32. Leg pull front (A)
- 33.Leg pull (A)
- 34. Side kick kneeling (A)
- 35. Side bend (A) see \*\* and \*\*\*
- 36. Boomerang (A)
- 37. Seal (I)
- 38. Crab (A)
- 39. Rocking (A)
- 40. Control balance (A)
- 41. Push-up (A).
- \*Thigh stretch (transition) from double-leg kick to neck pull.
- \*\*Mermaid (intermediate instead of side bend).
- \*\*\* Snake/twist super advanced version of side bend.

#### **Standing**

- ½ Roll down
- Heel raise and foot pedals
- Knee raise
- Arm floats front and lateral
- Corkscrew arms
- Squat or monkey squat
- Spine twist
- Side bend/mermaid.

#### **Prone**

- Breaststroke prep
- Breaststroke
- Gluteal bracing.

#### Side lying

- Side lying open door
- Leg raises (single and double)
- Leg circles
- Leg kick
- Side plank variations.

#### All fours (quadruped)

- Leg pull prep
- Cat pedals
- Pinpoint arms/legs and bird dog/superman (swimming prep)
- Thread the needle
- Plank (3/4 and full).

### Appendix 2: Pilates reformer exercises

#### Please note:

- The lists of exercises offered below are shared to provide a guide to the broad range of exercises available in the reformer repertoire.
- Unlike the mat repertoire, there is no publication of the exercise selection or order suggested by Joseph Pilates; the exception being wall photos from the original studio and archives.
- All exercise sequences are likely to vary and be interpretations shared by the Pilates 'elders' (the first, second, and third generation teachers).
- Some approaches may more closely follow the flow and order with consideration to spring use and repetitions. Other approaches may have a more 'fitness-based' focus.

Reformer exercises and order			
Romana Kryzanowska Sourced from: https://tinyurl.com/yr93jvmn (2024)	Jay Grimes:  • basic order (classical)  • intermediate (classical)  • advanced  • super advanced  Sourced from: <a href="https://pilatesology.com/exercise-lists-sequences/">https://pilatesology.com/exercise-lists-sequences/</a> .(2024)	Rael Isacowitz Sourced from: 'Pilates: The complete guide.'  Key: B = Basic I = Improver A = Advanced	The Society for the Pilates method (SPM) Sourced from: The SPM (2024)
Reformer - Romana intermediate Footwork  • Toes	Beginner https://tinyurl.com/5t5ehd5a  Footwork  • Toes	<ul><li>Footwork</li><li>Parallel heels (B)</li><li>Parallel toes (B)</li></ul>	<ol> <li>Footwork</li> <li>Hundred</li> <li>Overhead</li> <li>Coordination</li> <li>Rowing series (1 to 6):</li> </ol>

#### Reformer exercises and order

- Arches
- Heels
- Tendon stretch.

#### Hundred

#### Short spine massage

#### Coordination

#### Long box series

- Pull staps
- Backstroke
- Teaser.

#### Short box series

- Round back
- Flat back
- Side to side
- Twist
- Tree.

#### Long stretch series

- Long stretch
- Down stretch
- Up stretch
- Elephant.

#### Stomach massage series

- Arches
- Heels
- Tendon stretch.

#### Hundred

#### Feet in straps

• Leg circles & frogs.

#### Stomach massage series

- Round
- Hands back
- Reach up.

#### Short box series

- Round back
- Flat back
- Side to side
- Tree.

#### **Elephant**

#### Knee stretch series

- Round
- Arched
- Knees off.

#### Running

#### **Pelvic lift**

- V position toes (B)
- Open V heels (B)
- Open V toes (B)
- Calf raises (B)
- Prances (B)
- Single-leg heel (B)
- Single-leg toe (B)
- Prehensile (B).

#### **Abdominal work**

- Hundred prep (B)
- Hundred (I)
- Coordination (I)
- Roundback (I)
- Flatback (I)
- Climb a tree (A)
- Backstroke (A)
- Abdominals with legs in straps (I)
- Obliques with legs in straps (I).

#### Hip work

• Frog (B)

- a. Sternum
- b. 90 degrees
- c. From chest
- d. From hips
- e. Shave
- f. Hug
- 6. Swan (and prep)
- 7. Long box series (1 to 7):
  - a. Pull straps
  - b. T pull
  - c. Backstroke
  - d. Teaser
  - e. Breaststroke
  - f. Hamstring curls
  - g. Horseback.
- 8. Long stretch series (1 to 5-8):
  - a. Long stretch
  - b. Down stretch
  - c. Up stretch and combo
  - d. Elephant and singleleg
  - e. Long back stretch and single-leg.
- Stomach massage series (1 to 4):
  - a. Round back
  - b. Hands back
  - c. Reach up

#### Reformer exercises and order

- Round
- Hands back
- Reach up
- Twist semi-circle

#### Feet in straps

- Leg circles
- Frogs.

#### Knee stretch series

- Round
- Arched
- Knees off

#### Running

- Pelvic lift
- Side splits
- Front splits.

- Down circles (B)
- Up circles (B)
- Openings (B)
- Extended frog (I)
- Extended frog reverse (I).

#### Spinal articulation

- Bottom lift (I)
- Bottom lift with extension (I)
- Semi-circle (I)
- Short spine (I)
- Long spine (I).

#### **Stretches**

- Hamstring stretch standing lunge (B)
- Hamstring stretch kneeling lunge (I)
- Hamstring stretch full lunge (I).

#### **Full body integration**

- Scooter (I)
- Knee stretch round back(I)

- d. Twist.
- 10. Tendon stretch (and singleleg, and prep)
- 11. Short box series (1 to 5)
- 12. Short spine massage:
  - a. Round
  - b. Flat
  - c. Side to side
  - d. Twist and reach + hips
  - e. Tree + side sit-ups.
- 13. Semi-circle
- 14. Headstands (up and down)
- 15. Chest expansion
- 16. Thigh stretch
- 17. Backbend
- 18. Arm circles and Swakate
- 19. Snake and twist (and bar up)
- 20. Head stand with straps
- 21. Corkscrew
- 22. Tic toc
- 23. Control balance off
- 24. Second long box series:
  - a. Grasshopper
  - b. Rocking
  - c. Swimming.
- 25. Long spine massage
- 26. Frogs and circles (and single foot)

Reformer exercises and order		/was stretch flat bank (1)	27 High bridge
		<ul> <li>Knee stretch flat back (I)</li> <li>Stomach massage round back (I)</li> <li>Stomach massage flat back (I)</li> <li>Reverse knee stretch (I)</li> <li>Down stretch (I)</li> <li>Elephant (B)</li> <li>Up stretch (I)</li> <li>Long stretch (I)</li> <li>Balance control front (A)</li> <li>Balance control back prep (A).</li> </ul> Arm work	27. High bridge 28. Mermaid 29. Knee stretch series:
Full classical order: (Romana's)  • Footwork (basic)  • Hundred (basic)  • Short spine (changes to overhead in the advanced)   (*intermediate – replaces frog and leg circles which are basic)	Intermediate https://tinyurl.com/3k9xeyc8  Footwork	<ul> <li>Supine arm extension (B)</li> <li>Supine arm adduction (B)</li> <li>Supine arm circles (B)</li> <li>Supine triceps (B)</li> <li>Seated chest expansion (I)</li> <li>Seated biceps (I)</li> <li>Seated rhomboids (I)</li> <li>Seated hug a tree (I)</li> </ul>	

#### Reformer exercises and order

- Coordination (intermediate)
- Rowing series
- Back rowing (intermediate/advanced)
  - Into the sternum or round back (1)
  - o 90/90 or straight back (2).
- Front rowing
  - o from the chest (3)
  - from the hips (round back) (4)
  - Shaving / salute
  - Hug a tree
- Long box
  - Swan on ladder barrel or long box (intermediate on LB; Advanced on reformer).
- Pull straps
  - Straight arms back (intermediate/adva nced)

- Short spine massage
- Coordination
- Swan on ladder barrel (introduced on Reformer in advanced repertoire)
- Long box series
  - Pull straps
  - Backstroke
  - Teaser.

#### Short box series

- Round back
- Flat back
- Side to side
- Twist
- Tree.

#### Long stretch series

- Long stretch
- Down stretch
- Up stretch
- Elephant.

#### Stomach massage series

Round

- Seated salute (I)
- Kneeling chest expansion (I)
- Kneeling arm circles (I)
- Kneeling salute (I).
- Kneeling biceps (I)
- Rowing back I (I)
- Rowing back II (I)
- Rowing front I (I)
- Rowing front II (I).

#### Leg work

- Side split (I)
- Single-leg skating (I)
- Hamstring curl (I).

#### Lateral flexion and rotation

- Tilt (B)
- Twist (B)
- Side over (I)
- Mermaid (I).

#### **Back extension**

• Breaststroke prep (B)

○ T shape.	Hands back	Breaststroke (I)
Back stroke swimming (intermediate)	Reach Up	Pulling straps I (I)
	Twist.	Pulling straps II (I).
Teaser (intermediate)	Semi-circle	T uning suaps if (i).
Breast stroke (super advanced)	Feet in straps	
Horseback (advanced	<ul> <li>Leg circles</li> </ul>	
<ul> <li>Horseback (advanced on reformer; can be performed on ladder barrel).</li> </ul>	• Frogs.	
	Knee stretch series	
Short box:	Round	
	Arched	
<ul><li>Hug or round (basic)</li></ul>	<ul> <li>Knees off</li> </ul>	
<ul> <li>Straight back</li> </ul>	Running	
(basic)	Pelvic lift	
<ul><li>Side to side</li></ul>	Side splits	
(intermediate)	Front splits	
<ul><li>Twist and reach (intermediate)</li></ul>		
<ul><li>Tree (basic – advanced)</li></ul>		
<ul> <li>Side bend (advanced / super advanced).</li> </ul>		
Long stretch series:		

Reformer ex	xercises and order
0	
	(intermediate)
0	Down stretch (intermediate)
0	Up stretch (intermediate)
0	
0	Long back stretch (advanced).
2 bas Interr *perfo circle	nach massage (1 + sic; 3 + 4 mediate) ormed after leges/short spine in crepertoire):
0	round, straight back, reaching, twist.
	on stretch anced).
short in the	head (advanced t spine can go here e advanced rtoire).

Reformer exercises and order
<ul> <li>Semi-circle (intermediate)</li> </ul>
<ul> <li>Headstands (super advanced – rarely taught)</li> </ul>
<ul> <li>Chest expansion (advanced)</li> </ul>
<ul> <li>Thigh Stretch (advanced)</li> </ul>
<ul> <li>Backbends (super advanced – rarely taught)</li> </ul>
<ul> <li>Kneeling arm series (circles, shaving, biceps) (advanced)</li> </ul>
Snake/twist (advanced)
<ul> <li>Headstands with straps (super advanced – rarely taught)</li> </ul>
• Corkscrew (advanced)
<ul> <li>Tick tock (advanced)</li> </ul>
<ul> <li>Balance control (into arabesque) (advanced)</li> </ul>
<ul><li>Second long box:</li></ul>
<ul><li>Grasshopper (advanced)</li></ul>

ormer e	exercises and order
0	Rocking (advanced)
0	Swimming (advanced)
0	Long Spine (advanced).
	n bridge (super anced – rarely <sub>I</sub> ht)
• Merm	maid (basic)
<ul><li>Knee</li></ul>	e stretches (basic)
• Runn	ning (basic)
• Pelvi	ric lift (basic)
	trol push ups front back (advanced)
• Star	(advanced)
	e splits ermediate)
	nt splits ermediate)
	sian splits anced)
	sian squat (super anced – rarely <sub>I</sub> ht)

# Appendix 3: Recommended resources and reference material

Please note: This is NOT intended to be an exhaustive list of references.

#### Joseph Pilates and his history

- Howard Steel, J. (2020) Caged Lion. Joseph Pilates and His Legacy. USA: Last Leaf Publications.
- Pérez Pont, J. and Romero, E. (2017) *Hubertus Joseph Pilates. A True History of Joseph Pilates*. Spain: Create Space Independent Publishing Platform.
- Pilates, J. and Miller, W. J. (1945) *Return to life through Contrology.* USA: J.J. Augustin. Republished in 1998, USA: Presentation Dynamics.
- Pilates, J. (1934) *Your health*. USA: Joseph H Pilates. Republished in 1998-2008, USA: Presentation Dynamics.
- Strack, C. (2022) Get to know Joseph Pilates. USA: Pilates Projects.

#### **Pilates Anatomy**

- Isacowitz, R. & Clippinger, K. (2011) Pilates Anatomy. USA: Human Kinetics.
- Ward, T. (2022) Science of Pilates. UK: Dorling Kindersley Limited.

#### Pilates method approaches

- Bass, M. (2004) The Complete Classic Pilates Method. UK: MacMillan.
- Friedman, P. & Eisen, G. (2005) The Pilates Method of Physical and Mental Conditioning.
   USA: Viking Studio.
- Herdman, A. (2004) The Pilates Directory. UK: Chartwell Books.
- Herdman, A. (2007) Pilates for Men. UK: Gaia.
- Herdman, A. and Paul, G. (2007) Pilates Plus. Grown-up Pilates for 50+. UK: Gaia.
- Herdman, A. (2014) The Complete Pilates Tutor. UK: Gaia.
- Isacowitz, R. (2006) Pilates. Your complete guide to matwork and apparatus exercises.
   USA: Human Kinetics.
- King, M. (2000) Pure Pilates. UK: Mitchell Beazley.
- King, M. (2003) Pilates: The Complete Body System. UK: Octopus Publishing Group.
- King, M. (2001) Pilates Workbook. UK: Publishers Group West.
- Keane, S. (2005) Pilates for Core Strength. UK: Main Street Pr.
- Keane, S. (2005) Pilates. Incorporating 'Chi' Principles. UK: Caxton Publishing Group.
- Latey, P. (2001) Modern Pilates. Australia: Allen and Unwin.
- Lawrence, D. (2008) *Pilates Method. An Integrative Approach to Teaching*. UK: Bloomsbury Publishing.
- Lett, A. and Diaz, K. (2015) *Innovations in Pilates Matwork*. Australia: Rebus Press.

- Muirhead, M. (2003) Total Pilates. UK: Spruce.
- Robinson, L. Bradshaw, L. and Gardner, N. (2009) The Pilates Bible. UK: Kyle Cathie Limited.
- Ross-Nash, K. (2015) The Red Thread: The Integrated system and Variations of Pilates the Mat. USA: Kathryn Ross-Nash New York Pilates.
- Ross-Nash, K. (2022) The Little White Book. USA: KRN Pilates.
- Siler, B. (2000). The Pilates Body. USA: Michael Joseph.

#### Reformer and other studio apparatus:

- Isacowitz, R (2006) Pilates. Your complete guide to matwork and apparatus exercises. USA: Human Kinetics.
- Robinson, L. Bradshaw, L. and Gardner, N. (2009) The Pilates Bible. UK: Kyle Cathie Limited.

#### Websites:

**Please note:** While the information sources listed are available at the point of development/publication; access to specific website pages will change over time, as will the currency of information.

#### Information sources and organisations:

- American College of Sports Medicine (ACSM): https://www.acsm.org/.
- American College of Obstetricians and Gynecologists (ACOG): https://www.acog.org/.
- Association for Nutrition: https://www.associationfornutrition.org/.
- Beat Eating Disorders: <a href="https://www.beateatingdisorders.org.uk/">https://www.beateatingdisorders.org.uk/</a>.
- British Diabetic Association- Diabetes UK: www.diabetes.org.uk.
- British Heart Foundation: www.bhf.org.uk.
- British Nutrition Foundation: https://www.nutrition.org.uk/.
- Chartered Institute for the Management of Sport and Physical Activity (CIMSPA): https://www.cimspa.co.uk/.
- Department of Health: <u>www.dh.gov.uk</u> .
- Drinkaware: https://www.drinkaware.co.uk.
- Eatwell Guide: <a href="https://www.nhs.uk/live-well/eat-well/food-guidelines-and-food-labels/the-eatwell-guide/">https://www.nhs.uk/live-well/eat-well/food-guidelines-and-food-labels/the-eatwell-guide/</a>.
- EMD UK: <a href="https://emduk.org/">https://emduk.org/</a>.
- National Centre for Sport and Exercise Medicine (NCSEM): <a href="https://www.ncsem.org.uk/">https://www.ncsem.org.uk/</a>.
- National Institute of Health and Care Excellence (NICE): https://www.nice.org.uk/.
- National Library of Sports Medicine: https://pubmed.ncbi.nlm.nih.gov/18049985/.
- NHS Choices: www.nhs.uk/Livewell/Goodfood/Pages/eatwell-plate.aspx.
- Pilates-ology: https://pilatesology.com/.
- Pilates anytime: https://www.pilatesanytime.com/.
- Pilates Andrea: <a href="https://pilatesandrea.com/pre-pilates-exercises-what-are-they-and-who-does-them/">https://pilatesandrea.com/pre-pilates-exercises-what-are-they-and-who-does-them/</a>.
- Pilates Teacher Association: www.pilatesteacherassociation.org .
- Royal College of Obstetricians and Gynaecologists (RCOG): https://www.rcog.org.uk/.
- STOTT Pilates ® Professional repertoire: <a href="https://merrithewconnect.com/categories/stott-pilates-professional-repertoire">https://merrithewconnect.com/categories/stott-pilates-professional-repertoire</a>.
- The Society for the Pilates Method: <a href="https://thesocietyforthepilatesmethod.com/history/">https://thesocietyforthepilatesmethod.com/history/</a>.
- World Health Organization (WHO): https://www.who.int/.

### Guidance for training providers

#### Centre and qualification approval

Before you can begin delivery of this qualification, you must be a YMCA Awards centre with appropriate qualification and staff approval.

Find out more on our website:



ymcaawards.co.uk/approvals

#### Tutor, assessor, and IQA requirements

All tutors, assessors, and internal qualify assurance (IQA) staff need to hold:

- A subject matter qualification.
- A qualification related to the role that they will be performing (tutor, assessor or IQA).

Find out more on our website:



ymcaawards.co.uk/approvals/staff-approval

#### Additional requirements to deliver and assess reformer qualifications

To deliver the listed qualifications, the following are required in addition to teaching and assessing qualifications.

#### YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups (610/6206/6)

Tutors, assessors, and internal quality assurers delivering this qualification should:

- Hold a regulated qualification in Pilates matwork.
- Have completed an endorsed programme or equivalent in reformer (level, content and assessment aligning to the regulated qualification).
- Have experience teaching reformer to groups, or if one-to-one hold a group exercise qualification.
- Have, or plan to undertake, broader training in the full Pilates system (e.g. chair, cadillac/trapeze/tower, ladder barrel, small barrels, spine corrector) to support their professional development and subject knowledge. While not a requirement for approval, this extended knowledge supports alignment with sector expectations and enhances delivery quality, particularly when contextualising reformer within the wider Pilates system.

An action will be set for any tutors, assessors, or internal quality assurers who do not currently hold this training, including those in the process of completing it, to support this area of continuing professional development.

### YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: Groups and One-to-One (610/4342/4)

Tutors, assessors, and internal quality assurers delivering this qualification should:

- Hold a regulated qualification in Pilates matwork.
- Have completed an endorsed programme or equivalent in reformer (level, content and assessment aligning to the regulated qualification).
- Have experience teaching reformer to groups and one-to-one, or if one-to-one only hold a group exercise qualification.
- Have, or plan to undertake, broader training in the full Pilates system (e.g. chair, cadillac/trapeze/tower, ladder barrel, small barrels, spine corrector) to support their professional development and subject knowledge. While not a requirement for approval, this extended knowledge supports alignment with sector expectations and enhances delivery quality, particularly when contextualising reformer within the wider Pilates system.

An action will be set for any tutors, assessors, or internal quality assurers who do not currently hold this training, including those in the process of completing it, to support this area of continuing professional development.

### YMCA Level 3 Certificate in Instructing Pilates Studio Reformer: One-to-One (610/4951/7)

Tutors, assessors, and internal quality assurers delivering this qualification should:

- Hold a regulated qualification in Pilates matwork.
- Have completed an endorsed programme or equivalent in reformer (level, content and assessment aligning to the regulated qualification).
- Have experience teaching reformer (one-to-one).
- Have, or plan to undertake, broader training in the full Pilates system (e.g. chair, cadillac/trapeze/tower, ladder barrel, small barrels, spine corrector) to support their professional development and subject knowledge. While not a requirement for approval, this extended knowledge supports alignment with sector expectations and enhances delivery quality, particularly when contextualising reformer within the wider Pilates system.

An action will be set for any tutors, assessors, or internal quality assurers who do not currently hold this training, including those in the process of completing it, to support this area of continuing professional development.

### YMCA Level 3 Diploma in Instructing Pilates Studio Reformer: Groups, One-to-One and Advanced Repertoire (610/4343/6)

- Tutors and assessors must be trained in the full system of Pilates apparatus (chair, cadillac/trapeze/tower, ladder barrel, small barrels, spine corrector etc).
- Have experience teaching the full system.

### YMCA Level 3 Award in Instructing Pilates Studio Reformer: The Advanced Reformer Repertoire (610/4344/8)

- Tutors and assessors must be trained in the full system of Pilates apparatus (chair, cadillac/trapeze/tower, ladder barrel, small barrels, spine corrector etc).
- Have experience teaching the full system.

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