

THEORETICAL TRAINING PROPOSED LEARNING UNITS	COMPETENCES	KNOWLEDGE	SKILLS /ABILITIES
<p align="center">Concepts and principles</p>	<ol style="list-style-type: none"> 1) Identify and agree goals with the client; 2) Select and agree appropriate components of fitness and activities with the client; 3) Integrate exercise science to the design of the programme; 4) Design physical activity programmes for weight management; 5) Design physical activity programmes for weight management. 	<p align="center">Professionalism, Code of Practice, Ethics, National Standards and Guidelines</p> <ul style="list-style-type: none"> • The ethical requirements that are intrinsic to the teacher role as stated in the national Health Fitness Code of Ethics, and identify opportunities for practical application when marketing, planning or providing teaching services. <p align="center">Customer Service:</p> <ul style="list-style-type: none"> • The definition of the exercise customer; • The basic principles of customer care to include perceived benefits; • The methods and practices, which contribute to effective customer care; • The skills of effective customer care: <i>Communication, Body language, Negotiation.</i> <p align="center">Components of Fitness:</p> <ul style="list-style-type: none"> • Components of health related fitness; • Components of physical fitness; • Factors that affect physical fitness; • The relationship between physical fitness, health related exercise, sports specific exercise and health. <p align="center">Principles of Training:</p> <ul style="list-style-type: none"> • Definitions & overview of the principles of training; • How the principles of training apply to each of the health related components of fitness. <p align="center">Promoting Activity for Health:</p> <ul style="list-style-type: none"> • The cardiorespiratory, muscular and flexibility related benefits of physical activity and the significance of these benefits in reducing risk of disease; • Appropriate exercise activity required for health benefits and fitness benefits - <i>e.g. health = 30mins per day (accumulative) 5 times per week, moderate intensity fitness = 20 mins per day (non stop) 3 times per week, vigorous intensity;</i> • The barriers and motivators to exercise participation; • The exercise prescription for health, well being and physical fitness and define the exercise prescription continuum for different levels of physical 	<ol style="list-style-type: none"> 1) Identification of client goals and of the barriers to their achievement; 2) Application of fitness background to selecting appropriate activities in consideration of medical or injury problems providing participants with accurate information; 3) Apply the knowledge of the cardio-respiratory system, energy systems, musculo-skeletal system, biomechanical concepts and physiological concepts to programme design; 4) Apply the knowledge of principles of training, components of health related fitness and advanced exercise science to the design of a weight management programme; 5) Apply the knowledge of principles of training, components of health related fitness and advanced exercise science to the design of a weight management programme.

		<p>activity to include relative benefits;</p> <ul style="list-style-type: none"> • The agencies involved in promoting activity for health in your home country. • How to promote a healthy lifestyle: <i>nutrition, other opportunities for physical activity in everyday life, smoking.</i> 	
<p>The organization and management of the training session</p>	<ol style="list-style-type: none"> 1) Plan and prepare for an exercise session; 2) Prepare Clients for the session; 3) Teach clients planned activities for the session; 4) Evaluate the session and personal performance. 	<p>Information Gathering, Screening and Informed Consent:</p> <ul style="list-style-type: none"> • The importance of gathering information prior, to the start of the session in relation to participants and their needs. To include: <i>Reasons for screening, The advantages and disadvantages of verbal and written screening, Purpose of the PAR Q and Informed Consent as a Health and Safety requirement, Participant expectations and motivation, Level of previous exercise participation and current level of ability.</i> • The “ EHFA Health Fitness Code of Ethics” or national standards and guidelines with reference to: <i>Competence, Confidentiality, Safety – this is specific to each country or adopt EHFA code of ethics.</i> <p>Planning a Gym Session:</p> <ul style="list-style-type: none"> • The national legal responsibilities of the fitness instructor; • How to identify status of participants relative to screening information; • How to identify any changes required (alternatives/ adaptations) to planned class activity; • Health & Safety checks to be made, relevant to the exercise • Environment; • The information needed to respond appropriately to a medical; • Emergency; • How to provide an appropriate lesson plan for the planned class activity. <p>The Teaching Process:</p> <ul style="list-style-type: none"> • The structure of a gym session, to include: <i>Warm up, Main activity, Cool down;</i> • The skills of an effective and qualified gym instructor. <p>Body Awareness and Exercise Technique</p> <ul style="list-style-type: none"> • The importance of the trainee teacher being an influential role model in exercise performance; • A range of activities that illustrate an awareness of: <i>Posture, Alignment, Control of static and dynamic movement, Exploring the potential for full range movement, Spatial awareness.</i> 	<ol style="list-style-type: none"> 1) Collect, record and analyse accurate information about the facility and the participant(s). Design the exercise session in order to meet its aims and objectives for the in line with the needs of the client(s) and the overall programme. Assess and minimise risks before the session; 2) Check participant’s experience and conduct a pre-activity screening. Prepare the participants physically for the session using safe and effective warm ups and explain the and demands of the session; 3) Utilise appropriate teaching methods and skills, observing and monitoring participants in the session, correcting and improving their performance; 4) Evaluate the session, amend and improve future session plans and own performance based on evaluation and feedback.

<p style="text-align: center;">Elements of physiology</p>		<p style="text-align: center;">Body Composition:</p> <ul style="list-style-type: none"> • Composition of the human body; • Factors affecting body composition; • The types of basic body composition measurement. <p style="text-align: center;">Bones and Joints:</p> <ul style="list-style-type: none"> • The major bones and joints; • The structure & function of the skeleton; • The structure & function of the spine & recognise normal movement possible at the three main curves; • The stages of bone growth and the effects of exercise on bones & joints; • Basic types of bones & joints; • Basic structure of synovial joints and the short term effects of exercise on them; <p style="text-align: center;">Muscles and muscle actions:</p> <ul style="list-style-type: none"> • Voluntary, involuntary and cardiac muscle; • The basic structure of muscles including: <i>Muscle fibres, Actin & Myosin, their role in muscle contraction, Connective tissue;</i> • Muscle fibre types (red, white, slow, fast, intermediate, fast, oxidative, glycolitic); • How fibres are recruited in muscle contraction (all or none theory); • The principles of muscle contraction, for example: <i>Muscles cross joints; Muscles only pull, Contraction along the line of fibres, Working in pairs;</i> • Basic muscle contraction e.g.: <i>Concentric/Eccentric/Isometric (Static), Prime mover, Antagonist and Fixators;</i> • The major muscle groups of the body; • Joints crossed by muscle groups; • The principles of paired muscle actions; • Joint actions brought about by specific muscle group contractions. <p style="text-align: center;">Heart, Lungs, & Circulation</p> <ul style="list-style-type: none"> • The passage of Oxygen through nose, mouth, windpipe and air sacs; • How Oxygen & Carbon Dioxide change places & how oxygen travels to the muscles via the blood; • The action of the diaphragm and the basic mechanics of breathing; • The basic structure of the heart and how blood is pumped and collected; 	
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THEORETICAL TRAINING PROPOSED LEARNING UNITS	COMPETENCES	KNOWLEDGE	SKILLS /ABILITIES
<p>Health and safety</p>	<ol style="list-style-type: none"> 1) Assess and minimise risk within the exercise setting; 2) Deal with accidents and emergencies; 3) Ensure compliance with appropriate legislative requirements. 	<p style="text-align: center;">Safe and Effective Exercise</p> <ul style="list-style-type: none"> • The following and their relationship to safe exercise: <i>Individual fitness levels, Individual range of movement, Body type, Comfort of position, Temperature, Speed of activity, Stability of position, Skeletal alignment, Previous injury;</i> • Movements for safety and effectiveness applying the above conditions; • Ways of reducing the risks associated with unsafe exercise. <p style="text-align: center;">Cardio-Pulmonary Resuscitation (CPR) and First Aid</p> <ul style="list-style-type: none"> • The CPR and First Aid requirements for their employer and country. <p style="text-align: center;">Health and Safety/ Dealing with Accidents and Emergencies:</p> <ul style="list-style-type: none"> • National H&S procedures in the working environment/Risk assessment /Identifying procedure; • Ways and methods for dealing with emergencies and calling outside services. 	<ol style="list-style-type: none"> 1) Demonstrate a duty of care to clients identifying likely hazards and minimising the risk within the exercise setting; 2) Deal effectively with injuries and signs of illness being able to follow appropriate emergency procedures efficiently; 3) Ensure compliance with appropriate insurance Guidelines.
<p>The training equipment (preparation and maintenance)</p>	<ol style="list-style-type: none"> 1) Teach the appropriate use of machines 2) Prepare clients training workout sheet 3) Guarantee a correct use of machines 	<p style="text-align: center;">Resistance machine lifts:</p> <ul style="list-style-type: none"> • Resistance Training terms and definitions; • Correct lifting technique for resistance machines to include: Leg press: Bench press: Leg extension: Leg curl: Seated shoulder press: Seated pulley row: Biceps curl: Upright row: Triceps pushdown: Pulldown to the chest; Pec dec: Total Hip: Seated abduction: Seated adduction; • The variables appropriate to each machine [seat height, point of pivot]; • The primary and secondary (where relevant) muscle groups involved in each of the above exercises; • Whether exercise is a multiple or single joint exercise and the suitability of each for beginner clients; • The various types of warm up relevant to resistance training; • The pros and cons for including CV Machines or Body Weight to effectively warm up. <p style="text-align: center;">Cardio Vascular (CV) Machines:</p> <ul style="list-style-type: none"> • Correct technique for using CV machines, to include: • Treadmill: Rower: Stepper: Upright bike: Recumbent bike: Elliptical Trainer. • The variables appropriate to each machine and the various adaptations that may be required to allow for individual differences. 	<ol style="list-style-type: none"> 1) Demonstrate the use of machines; 2) Utilise appropriate teaching methods and skills, observing and monitoring participants in the use of machines, correcting and improving their performance; 3) Guarantee a correct preparation and maintenance of training equipment, during and after the training session.

		<p>Free Weights (Standing):</p> <ul style="list-style-type: none"> • Correct lifting technique for standing free weight lifts, to include: <i>Dead lift, Upright row (Narrow Grip & Wide Grip) , Bicep curl, Dumbbell lateral raise, Back squat, Front Squat, Leg Lunge, Shoulder press: Dumbbell curl;</i> • Correct body alignment and weight distribution through the concentric (positive) and eccentric (negative) phase of each exercise; • The primary and secondary (where relevant) muscle groups involved in each of the above exercises; • Whether exercise is a multiple or single joint exercise and the suitability of each for beginners; • The various adaptations that may be required to allow for individual differences. <p>Free Weights (Bench) Including Spotting:</p> <ul style="list-style-type: none"> • Correct lifting technique for bench free weight lifts, to include: <i>Bench press (Flat/Incline,: Lying triceps extension, Single arm row, Bent arm pull over, Supine dumbbell flyes (Flat/Incline), Dumbbell chest press, Dumbbell prone flyes or Prone row.</i> • Safe and effective spotting techniques; • The various adaptations they may be required to allow for individual differences. 	
Psycho-pedagogic basis of training			

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PROPOSED LEARNING UNITS			
<p>Methods and techniques used in the practice of the sports discipline</p>	<ol style="list-style-type: none"> 1) Identify participants incentives and barriers to participate in exercise; 2) Develop and apply strategies to motivate participants to join and adhere to and exercise programme; 3) Inform participants of the benefits of a healthy lifestyle; 	<p style="text-align: center;">Methods of Resistance Training:</p> <ul style="list-style-type: none"> • A variety of resistance training methods/systems. E.G. pyramid, circuit, super setting; • The value of these according to individual participants. <p style="text-align: center;">Practical Guidelines for Teaching Resistance Training</p> <ul style="list-style-type: none"> • How to demonstrate and practice the resistance training programs: <ul style="list-style-type: none"> <i>Name the exercise,</i> <i>Name the general area of the body,</i> <i>Name the muscle (prime mover),</i> <i>Perform a silent demonstration of the exercise,</i> <i>Explain the demonstration,</i> <i>Teach into position giving key teaching points,</i> <i>This should include change of teaching position; individual feedback /questioning, individual correction / adaptation.</i> <p style="text-align: center;">Methods of Cardio Respiratory Training:</p> <ul style="list-style-type: none"> • A variety of cardio respiratory training methods and discuss their value according to participant needs. E.G. interval, fartlek. <p style="text-align: center;">Aerobic Theory:</p> <ul style="list-style-type: none"> • The aerobic/anaerobic continuum; • The physiological and health related changes that occur as a result of aerobic training; • The benefits of aerobic training; • Characteristics of aerobic and anaerobic activities i.e. running, walking, sprinting, jumping; • The Overload principle i.e. F.I.T.T.A (Frequency, Intensity, Time, Type,Adherence) applied to aerobic training; • Application of all other principles of training to aerobic strength • Different methods of intensity monitoring to include: <i>Heart Rate Monitoring, Rate of Perceived Exertion, Talk test;</i> • Factors affecting an individuals’ ability to achieve an aerobic training effect; • Structure of the aerobic component within a health related exercise session to include: <i>Re-warm, Peak and Warm Down.</i> 	<ol style="list-style-type: none"> 1)Recognize factors that encourage clients to participate in exercise and barriers to exercise; 2)Integrate appropriate motivational strategies to encourage long term adherence to the programme and to positive lifestyle practices; 3)Educate participants on the components of a healthy lifestyle, providing them with accurate information about recommended amount of physical activity, on principles of nutrition and weight and stress management;

		<p style="text-align: center;">Stretch Theory:</p> <ul style="list-style-type: none"> • The range of movement continuum; • The physiological and health related changes that occur as a result of stretching; • The different types of stretching (dynamic and static); • The different methods of stretching (active & passive) • Stretch Reflex, Desensitisation and Lengthening of muscle tissue (muscle creep); • The overload principle F.I.T.T.A. (Frequency, Intensity, Time, Type, Adherence) applied to stretching; • Application of all other principles of training to flexibility; • The need for a whole body approach; • Factors affecting an individual’s potential range of movement; • Activities that improve range of movement. 	
<p style="text-align: center;">Monitoring and assessment of the training level in a sports discipline</p>	<ol style="list-style-type: none"> 1) Review and modify the programme as appropriate to client progress; 2) Monitor, evaluate and adjust programmes for individuals and groups. 	<p style="text-align: center;">Monitoring Exercise Intensity</p> <ul style="list-style-type: none"> • Different ways of monitoring exercise intensity, to include: <i>Taking own pulse, Rate of Perceived Exertion (RPE). (advantages & disadvantages of both);</i> • Personal maximum heart rate and training zones; • Class content, structure and teaching; • The four Heart Rate Training Zones; • How the heart rate training zones relate to Rate of Perceived Exertion and Heart Rate monitoring. <p style="text-align: center;">Safe Progressive Exercise Planning</p> <ul style="list-style-type: none"> • The relevance of physiological changes occurring in the body and how to progress exercises over a period of time; • The progressive changes that can be made in terms of overload to include: <i>Frequency, Intensity, Time, Type, Adherence Principles of training such as specificity, progressive overload, reversibility etc.</i> <p style="text-align: center;">Warm Up</p> <ul style="list-style-type: none"> • The reasons for warming up; • The physiological changes that happen in the body; • Activities that can be used in a warm up; • The different structures of a warm up; • Factors that will affect the structure of a warm up; 	<ol style="list-style-type: none"> 1) Modify programme according to client progress, giving feedback to client based on review; 2) Revise programme based on results and reviewed goals.

		<ul style="list-style-type: none"> • Specific warm ups in relation to a variety of activities to include: • Ways of progressing a warm up. <p style="text-align: center;">Cool Down</p> <ul style="list-style-type: none"> • The reasons for cooling down; • Activities that achieve the above (Stretching, Relaxation and Wake up); • Different structures of a cool down; • The physiological changes that happen in the body; • Factors that will affect the structure of a cool down; • Specific cool downs in relation to a variety of activities to include: <i>Aqua, exercise to music and gym.</i> <p style="text-align: center;">Progression:</p> <ul style="list-style-type: none"> • The relevant physiological changes that occur in the body as a result of changes made to progress a programme over a period of time; • The progressive changes that can be made in terms of overload: <i>Frequency, Intensity, Time, Type, Adherence Rate, Resistance, Repetitions, Rest, Range of movement.</i> <p style="text-align: center;">Modification of Exercise Alternatives/ Adaptation</p> <ul style="list-style-type: none"> • Individual / group performance needs and explore more appropriate exercise activity. <p style="text-align: center;">Ending a Session, Evaluation, Giving/ Gaining Feedback:</p> <ul style="list-style-type: none"> • Giving feedback to participants regarding their performance; • Gathering information from participants to improve personal performance; • Identifying other sources of feedback to include: <i>managers, coordinators, colleagues;</i> • Using appropriate questions to gain relevant information; • Evaluateing own performance against formative and summative • observation checklist criteria; • Ensuring participants leave class safely; • Putting equipment away and assess for future use; • Leaving environment in safe condition for future use; • Informing participants of time, location and content of further 	
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Environmental awareness			

Source: own elaboration of competences, knowledge and skills produced by the project 'Setting The Standards For The European Health and Fitness Sector' (Eurofit-QST UK/03/B/F/PP-162_017).