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| **EQF Level 5 Exercise for Health Specialist**  **Core Knowledge & Skills Requirements**  **Mapping Toolkit** |

In this mapping toolkit you will find all the core knowledge and skills requirements which you will need to part-map your Assessed Exercise for Health Specialist (EFHS) training programme in order for it to be endorsed for recognition by REPs Ireland.

**Overview**

* Role of the EFHS
* Advanced Functional Anatomy and Biomechanics
* Physiology and pathophysiology
* Nutrition for health
* Psychosocial aspects of health & fitness: changing health behaviour
* Health & Fitness Assessment: collecting and analysing information
* Training adaptations, Exercise planning & programming for individuals with controlled medical conditions
* Patient management and programme administration

**Core Knowledge Areas:**

1. **Role of the EFHS**
   1. The rationale for exercise for health services
   2. Professional development in exercise for health
2. **Advanced Functional Anatomy and Biomechanics**
   1. Anatomy of integrated function
3. **Physiology and pathophysiology**
   1. Aetiology and pathophysiology of common NCDs
   2. Researching unfamiliar conditions
4. **Nutrition for health**
5. Eating for health
6. Scope of practice and making referrals
7. **Psychosocial aspects of health & fitness**

5.1 Psychological approaches in exercise for health

5.2 Social aspects of exercise for health

1. **Health & Fitness Assessment: collecting and analysing information**
   1. Screening and risk stratification in exercise for health
2. **Training Adaptations, Exercise Planning and Programming for individuals with controlled medical conditions**
   1. Planning exercise with participants
   2. Guidance parameters for exercise with participants
   3. Effects of pathophysiology on exercise
   4. Adaptation and modification of exercise
3. **Participant management and programme administration**
4. Programme marketing and administration
5. Participant management and administration

*Acknowledgement: EuropeActive*

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**How to use this toolkit**

Using the righthand column, indicate where in your training materials the evaluator can see the relevant criteria evidenced. Use the third column to indicate the assessment method and materials used to assess the criteria, see example below:

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| **Content Summary and Learning Outcomes** | **Where can the evidence be found?** | **Where and how will it be assessed?** |
| **Learners should demonstrate knowledge and understanding of:** | | |
| * 1. **Individual Instruction – Core Knowledge** | | |
| **2.1.1 Designing an Individual Fitness Programme** | | |
| * The structure of an individual fitness programme, to include: Warm-up, Main activity, Cool down |  |  |
| * Designing an individual fitness programme | *Slide 9 of PowerPoint* | *Included in worksheet 2* |
| * The necessary skills of an effective and qualified fitness instructor. | *Slide 10 of PowerPoint* | *Not assessed* |
| **2.1.2 Delivering a Fitness Session** | | |
| * 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 activities |  |  |
| * Health & Safety checks to be made, relevant to the exercise environment | *Page 3 of the manual* | *Included in worksheet 4* |
| * The information needed to respond appropriately to a medical emergency |  |  |
| * How to provide an appropriate plan for the sessions. |  |  |

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| **Content Summary and Learning Outcomes** | **Where can the evidence be found?** | **Where and how will it be assessed?** |
| **Learners should demonstrate knowledge and understanding of:** | | |
| 1. **Role of the Exercise for Health Specialist** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| * 1. **The rationale for exercise for health services** | | |
| * The prevalence of NCDs Globally, within Europe and Nationally |  |  |
| * The economic impact of NCDs and the reason for political intervention in policymaking to tackle their increasing incidence |  |  |
| * How Exercise for Health Specialists can support existing healthcare provision in the management of NCDs |  |  |
| * The national, European and international initiatives to raise awareness of the importance of exercise for health |  |  |
| * The potential funding sources for Exercise for Health services including publically funded schemes and private practice as an Exercise for Health Specialist |  |  |
| * 1. **Professional Development in exercise for health** | | |
| * Opportunities for career development as an Exercise for Health Specialist |  |  |
| * The importance of and how to maintain Continuous Professional Development as an Exercise for Health Specialist |  |  |

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| 1. **Advanced Functional Anatomy and Biomechanics** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **2.1 Anatomy of integrated function** | | |
| * Musculoskeletal anatomical terms, locations and isolated functions of muscles, muscle groups and major joint actions |  |  |
| * The concept that in function every muscle acts in three dimensions |  |  |
| * The role of the myofascial system and properties of connective tissue |  |  |
| * Muscles work in a synergistic nature with fascia to create efficient movements of the body |  |  |
| * The main adaptations of gait - lifespan |  |  |
| * Common compensatory patterns (e.g., upper- and lower crossed syndrome) |  |  |
| * The impact of bone disease (osteoporosis) on the skeleton in relation to posture and movement potential |  |  |
| * The impact of joint disease (arthritis) on posture and movement |  |  |
| * The impact of obesity on the myofascial and musculoskeletal systems, posture and movement |  |  |
| * The effects of emotion on posture and movement in relation to mental health conditions including stress, anxiety and depression |  |  |
| * The effects of neurological conditions on movement capacity including stroke, MS, dementia, Alzheimer’s and Parkinson’s diseases |  |  |

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| 1. **Physiology and Pathophysiology** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **3.1 Aetiology and pathophysiology of common NCDs** | | |
| * Homeostatic control mechanisms and the implications of homeostatic imbalances |  |  |
| * The pathophysiology of hypertension, and dyslipidaemia |  |  |
| * The process of atherosclerosis and its effect on cardiovascular physiology and anatomy leading to blood vessel occlusion |  |  |
| * The outcomes of occlusion in cerebrovascular, coronary and peripheral blood vessels i.e. stroke, angina & MI and PAD |  |  |
| * The role of obesity in developing insulin resistance, impaired glucose tolerance and type 2 diabetes |  |  |
| * The causative factors and pathophysiology of overweight, obesity, metabolic syndrome, type 2 diabetes and type 1 diabetes |  |  |
| * The causative factors and pathophysiology of osteoarthritis, rheumatoid arthritis, and non-specific low back pain |  |  |
| * The causative factors and pathophysiology of osteopenia and osteoporosis |  |  |
| * The causative factors and pathophysiology of stress, general anxiety disorder and depression |  |  |
| * The causative factors and pathophysiology of dementia, Alzheimer’s disease, Parkinson’s disease and Multiple Sclerosis |  |  |
| * The causative factors and pathophysiology of COPD and asthma |  |  |
| * The causative factors and pathophysiology of myalgia |  |  |
| * The pathophysiology of breast cancer |  |  |
| **3.2 Researching unfamiliar conditions** | | |
| * Research methods and identifying credible sources of scientific information |  |  |
| * Approaching an unfamiliar medical condition in terms of identifying prevalence, causation, pathology, treatment/management, effects of exercise/physical activity and exercise guidelines for patients with the condition |  |  |
| * How to conduct consultations for new clients with unfamiliar medical conditions, i.e., what to ask, where to seek further advice, when to begin exercise, how to introduce activities that are safe and relevant to improving the client’s function/condition, rate of progression, setting expectations and goals that are appropriate and realistic in the context of the condition and medication effects |  |  |

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| 1. **Nutrition for Health** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **4.1 Eating for health** | | |
| * Their country’s national food guide model and other evidence-based guidelines for eating a healthy balanced diet containing all food groups |  |  |
| * The importance of obtaining adequate amounts of all macro and micronutrients in maintaining good health, particularly in those with existing medical conditions |  |  |
| * Specific nutrition recommendations for particular NCD’s, e.g., low fat and sugar diets for the management of cholesterol and triglycerides in those with CVD, limiting sodium intake for hypertensive participants and the use of tools such as glycemic index and glycemic load in those with insulin resistance metabolic syndrome and diabetes |  |  |
| * The concept that it is often not a lack of education about healthy eating but a lack of willingness or ability to make the required changes to eating habits that prevents individuals from improving their diet and achieving better health |  |  |
| **4.2 Scope of practice and making referrals** | | |
| * Professional boundaries and their scope of practice |  |  |
| * Processes for making referrals to public or privately funded nutrition and dietetic services |  |  |

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| 1. **Psychosocial aspects of Health & Fitness: Changing Health Behaviours** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **5.1 Psychological approaches in exercise for health** | | |
| * The value of empathy and the psychological barriers to increasing physical activity levels that many individuals with an NCD will experience |  |  |
| * Commonly held beliefs of individuals with NCDs and the impact of these beliefs on their actions which ultimately affects their adherence to healthy eating and physical activity guidelines |  |  |
| * How to identify an individual’s stage of readiness to change in the transtheoretical model and how this influences the motivational approach used |  |  |
| * Behaviour change tools that can be used to increase extrinsic and intrinsic motivation to adopt behaviours in healthy eating and physical activity |  |  |
| **5.2 Social aspects of exercise for health** | | |
| * The motivational value of social exercise and a sense of belonging |  |  |
| * Ways to facilitate the formation of social groups and encourage the formation of social support networks through exercise programme structure and scheduling of events |  |  |

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| 1. **Health & Fitness Assessment: Collecting and analysing information** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **6.1 Screening and risk stratification in exercise for health** | | |
| * How to use screening paperwork such as the PAR-Q, medical questionnaires and validated risk stratification tools to determine an individual’s suitability for exercise and the level of supervision required |  |  |
| * The processes and procedures for seeking medical consent to exercise when required as determined by screening protocols |  |  |
| * When it is appropriate to use anthropometric and resting measurements including blood pressure, height, weight, BMI, waist measurement, other circumference measurements, resting heart rate or palpation of pulse, static posture analysis, range of movement evaluation |  |  |
| * When it is appropriate to perform observation or analysis of gait, functional movement screening or functional capacity tests, submaximal estimation of aerobic capacity, muscular fitness testing, balance, co-ordination or other proprioceptive/motor skill evaluations and which tests are suitable for the individual’s level of ability and condition |  |  |

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| 1. **Training Adaptations, Exercise Planning & Programming for Individuals with Controlled Medical Conditions** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **7.1 Planning exercise with participants** | | |
| * National and local legislation, quality assurance frameworks or other policies and guidance relating to the provision of exercise services to participants |  |  |
| * The importance of compliance with and adherence to legislative or best practice guidelines for working with participants |  |  |
| **7.2 Guidance parameters for exercise with participants** | | |
| * ACSM or other evidence based guidelines for FITT and programme design for common NCD’s including; hypertension, dyslipidaemia, stable angina, post-rehabilitation controlled coronary heart disease, obesity, metabolic syndrome, diabetes types 1 and 2, osteoarthritis, rheumatoid arthritis, osteopenia, osteoporosis, general anxiety disorder, depression, COPD, asthma, myalgia, and mastectomy |  |  |
| * Resources for obtaining credible evidence-based exercise guidelines for medical conditions that are less common where guidelines are available |  |  |
| * How to safely programme exercise using the lower limits of all relevant exercise guidelines when an individual has more than one condition, complications or comorbid risk factors |  |  |
| * Communicating with an individual’s primary care physician to establish safe parameters within which the individual can perform physical activity in cases where no established guidelines are published for their particular medical condition or combination of conditions, or when abnormal responses to exercise are present although following guidelines prescription |  |  |
| **7.3 Effects of pathophysiology on exercise** | | |
| * The relationship between the aetiology, pathophysiology and the guidelines for controlling intensity, duration or type of exercise for individuals with a chronic condition in order to safely progress the individual’s programme without increasing the risk of adverse events |  |  |
| * The effect of a condition and the side effects of medication commonly used to treat it, on the outcome of exercise programmes compared to those expected in an un-medicated individual with normal physiology |  |  |
| * How to apply principles of periodization within the limits of recommended guidelines to achieve client’s desired long term outcomes without compromising health |  |  |
| * Structure exercise programmes to facilitate behaviour change in the long term, leading to self-sustained increases in physical activity |  |  |
| * Collect detailed medical, lifestyle and other information and set goals in a consultation in order to construct a programme that meets the client’s wants and needs |  |  |
| **7.4 Adaptation and modification of exercise** | | |
| * Adapting exercise programmes and modifying planned activities in response to a client’s acute needs on the day of a planned exercise session |  |  |
| * Know acute contraindications to exercise for the given conditions, and how to detect it |  |  |
| * Use appropriate methods of intensity monitoring relevant to the client, their goals, medical condition and the exercise environment |  |  |
| * Perform regular performance reviews with clients to evaluate progress against expectations and identify new goals |  |  |

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| 1. **Participant Management and Programme Administration** | | |
| **Learners should demonstrate knowledge and understanding of:** | | |
| **8.1 Programme marketing and administration** | | |
| * Market position and market advantage as an Exercise for Health Specialist |  |  |
| * How to identify a target market |  |  |
| * The networks and professional relationships that will benefit them as an Exercise for Health Specialist |  |  |
| * The various routes to market that exist locally and nationally as an Exercise for Health Specialist |  |  |
| * Where and how to advertise their services as an Exercise for Health Specialist |  |  |
| * How to identify an appropriate price point for services and develop a business model based on available revenue opportunities (potentially private, public or insurance funded, depending on national healthcare systems policy and legislation) |  |  |
| * How to create rapport with medical and healthcare professionals in order to develop their confidence in your ability to deliver a high quality service that is safe for their participants |  |  |
| **8.2 Participant management and administration** | | |
| * Policies that convey a professional, lawful and ethical approach to participant/client health & safety, equality of opportunity, quality assurance, confidentiality, security of and access to personal data, level of service they can expect, progress monitoring and reporting, terms and conditions of service that clearly identify the responsibilities of Trainer, medical professional and Client/Participant |  |  |
| * Processes that outline the communication pathway and agreed information required when recruiting/accepting new participants/clients with medical conditions |  |  |
| * How to manage data in compliance with all prevailing legislative requirements |  |  |
| * A system for administration that includes standardised documentation used to track and monitor client/participant progress and report to medical professionals at an agreed frequency |  |  |
| * A client database and client management system that allows records of previous communication with each client to be maintained in order to track and monitor progress effectively and follow up session non-attendance or lapsed clients |  |  |