

HEALTH AND FITNESS GROUP

Health-Related Exercise Specialist

1. Professional Area

The Health and Fitness area collectively concerns activities, behaviours, or policies maintaining or promoting health, physical fitness, or wellbeing, and consists of two related sub-areas, which may differ in terms of intervention, strategies and goals, as well as operative contexts:

- a) the area of *Health-Related Exercise* (or, *Health Training*), concerning the promotion, design, and execution of exercise as a means to maximise health, prevent and/or treat disease, and ameliorate or cope with disability, under the various health and age conditions, carried out in the context of health care centres or programs and under medical control as needed;
- b) the area of *Fitness* (*Personal or Group Training*), concerning the promotion, design, and execution of exercise meant to enhance individual fitness levels and wellness feelings, and to prevent disease in the healthy adult population, carried out in the context of sport or fitness centres and/or in private practice.

2. Standard Occupation

The *Health-Related Exercise Specialist* (or *Health Trainer*) is a graduate in sport science or related disciplines who is able to design and supervise, in appropriate contexts and with medical advice as needed, training programs, specifically tailored for the different age groups and health and social conditions, related to the maintenance and improvement of health and physical efficiency, to risk-factors prevention, to movement reeducation and rehabilitation, and to coping with chronic conditions or permanent disability.

3. Activities

- 3.1. Do risk stratification of subjects before exercise prescription and exercise testing. Design, administer and evaluate graded exercise tests.
- 3.2. Design, prescribe, administer and monitor individual and general training programs for healthy subjects, specifically tailored for the various age groups, such as children, adults, or the elderly.
- 3.3. Design and implement public health educational programs of physical activity for the prevention of major risk factors and chronic disorders (e.g., obesity, diabetes, hypertension, etc.).
- 3.4. Design, administer and monitor, under medical supervision, training programs for re-education, rehabilitation or coping in special groups and conditions, such as post-traumatic, cardiac or pulmonary patients, or other chronic conditions or disability.
- 3.5. Apply emergency procedures and safety measures.

4. Competences

- 4.1. Sound background in such areas as biology and physiology of exercise, conditioning and coaching, training science and biomechanics, psychology and public health. Understanding the basics of ergometry, pathophysiology, chronic diseases and main risk factors, along with capability to evaluate their implications to exercise and apply this understanding to risk stratification and graded exercise testing, with an ethical attitude and frame of reference.
- 4.2. Comprehensive knowledge of biology, physiology and functional capacity, psychology, nutrition and the problems of substance abuse, biomechanics of different sports, and training and coaching, with special regard to life-time sports. Capability to apply this knowledge to physical activity and understand the implications for the organism at the various ages. Capability to design, conduct, and evaluate exercise programs for children and for the elderly. Sensibility for the problems of older age immobility, inactivity and disability, and specific skills to deal with them.
- 4.3. Good understanding of major public health issues and principles of health education, with special respect to risk factors and chronic disorders. Attitude to understand social trends, behaviours and motivations, with special respect to their effects on health and lifestyle. Ability to design, conduct, and evaluate exercise programs appropriate to counter sedentariness in the general population.
- 4.4. Basic knowledge on traumas and other temporary or permanent disabilities or chronic disorders, understanding the implications of specific exercise programs, and capability to apply and implement the principles of movement therapy. Understanding the interactions between the therapy prescribed by physicians and the exercise program, and capability to adjust the program accordingly. Detailed knowledge of disease-specific findings, signs and symptoms increasing complication risk during exercise.
- 4.5. Specific experience, attitude and skills in applying emergency procedures; certification in basic cardiac life support.

5. Learning Outcomes

- 5.1 Apply basic knowledge and understanding acquired in the biomedical, psychological, and training areas, to design specific training programs, ethically sensible and based on individual preconditions of age, health status, and functional capacity. Integrate data from performance diagnosis and respective training prescriptions. Document training programs and performance progress, and sustain participants' motivation.
- 5.2 Design, conduct, and assess effective training programs specifically tailored for children or for the elderly, accounting for the specificities of growth and development, the aging process and age-related issues. Sensible attitude to such problems as the delicacy of psychophysical maturation and its wide implications for the growing organism, or the issues of old-age functional limitations, the relevance of mental status on general health, and the subjective notion of efficiency and wellbeing.
- 5.3 Apply the knowledge and understanding acquired in the areas of human and social biology, health psychology, and public health, with special respect to risk factors, lifestyle and social trends, to design, conduct, and evaluate exercise programs apt to effectively counter unhealthy habits and sedentarity, and sufficiently attractive and accessible to sustain motivation in the general population.
- 5.4 Apply the knowledge and understanding acquired in such areas as exercise biology, sport medicine and traumatology, chronic disorders and limitations, and adapted physical activity, to design, conduct, and evaluate, with medical supervision as needed, specific adapted sport or movement therapy programs, apt to provide or

support movement reeducation and rehabilitation in post-traumatic conditions or other health impairment, or to cope with chronic diseases or disabilities.

- 5.5 Readiness to apply with immediacy the knowledge and skills acquired in sport medicine and other health-related areas, to emergency procedures in the various situations.

In general, the learning outcomes imply knowledge, skills and attitudes that must satisfy qualitative criteria of modern content and high standards of excellence, as are typically met by a postgraduate program. As a rule, a Bachelor's Degree in an aligned health field and extensive experience in exercise testing or rehabilitation should be a prerequisite for entering the program.

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