

Module Definition Form (MDF)

| Module code: MOD005687 | | Version: 1 | Date Amended: 06/Nov/2023 | | |
|---|--|------------|---------------------------|-----------|--|
| 1. Module Title | | | | | |
| Exercise Medicine | | | | | |
| 2a. Module Leader | | | | | |
| Scarlett Moloney | | | | | |
| 2b. School | | | | | |
| School of Psychology, Sport and Sensory S | Sciences | | | | |
| 2c. Faculty | | | | | |
| Faculty of Science and Engineering | | | | | |
| 3a. Level | | | | | |
| 6 | | | | | |
| 3b. Module Type | | | | | |
| Standard (fine graded) | | | | | |
| 4a. Credits | | | | | |
| 15 | | | | | |
| 4b. Study Hours | | | | | |
| 150 | | | | | |
| 5. Restrictions | | | | | |
| Туре | Module Code | Modu | le Name | Condition | |
| Pre-requisites: | None | | | | |
| Co-requisites: | None | | | | |
| Exclusions: | lusions: None | | | | |
| Courses to which this module is restricted: | Sport and Exercise Science, Sport Coaching and Physical Education, and Strength and Conditioning with Rehabilitation | | | | |

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6a. Module Description

This module will cover an in-depth and comprehensive study how physical activity and planned exercise improves health, and how they may be promoted. This module will expand and develop your knowledge gained at Level 4 and 5 using a multidisciplinary approach to apply this to the aspects of health and disease.

The theoretical and practical know you acquire in this module will enable you to critically evaluate the role of physical activity in case studies of individuals with chronic and lifestyle-related health conditions.

The role of exercise prescription will be analysed and discussed in detail to evaluate how physical exertion can result in positive psychological, physiological, and metabolic adaptations. From this, you will be able to design a research informed exercise programme that is justified by the intended adaptations to aid disease management and improve quality of life.

This module will help to develop the key employability skills required in careers within clinical exercise science, working with clinical populations, and public health policy. The module will be taught through a combination of lectures and seminars. This module will be of particular interest to those who have an interest in physical activity, exercise and health, and wish to pursue a career in the clinical exercise sciences. Standard texts are available via the library and more specialist research literature is online.

6b. Outline Content

This module covers in detail the:

- Epidemiology, aetiology and the health economic burden of physical inactivity and sedentary behaviour, as a major public health problem of the 21st century.
- Explore exercise guideline for different populations.
- The psychological and behavioural principles of the development of physical activity and exercise interventions.
- The science of the normal ageing process and how a variety of diseases and disorders differ from it.
- Benefits of and limitations to exercise in individuals who suffer from common medical conditions and diseases. Case studies may include cardiovascular disease, obstructive and restrictive respiratory disease, neurological conditions, cancer, diabetes, and obesity.
- Principles of exercise prescription for those with chronic health conditions and students will explore how recommendations from research are important in informing these.
- The beneficial adaptations that occur in response to exercise training, how they aid disease management and improve
 quality of life.

6c. Key Texts/Literature

The reading list to support this module is available at: https://readinglists.aru.ac.uk/

6d. Specialist Learning Resources

Accelerometers and Cambridge Centre of Sport and Exercise Sciences Laboratories.

| 7. Learn | 7. Learning Outcomes (threshold standards) | | | | | | |
|-------------------------------|---|--|--|--|--|--|--|
| No. Type | | On successful completion of this module the student will be expected to be able to: | | | | | |
| 1 Knowledge and Understanding | | Critically demonstrate the physiological, psychological and societal rationales to population physical activity promotion and sedentary behaviour reduction. | | | | | |
| 2 | Knowledge and Understanding | Critically appraise the mechanisms leading to health improvement via physical activity participation and sedentary behaviour reduction. | | | | | |
| 3 | Intellectual, practical, affective and transferrable skills | Apply critically evaluated public health knowledge to the development of physical activity promotion and sedentary behaviour reduction interventions. | | | | | |
| 4 | Intellectual, practical, affective and transferrable skills | Apply methodological understanding to the assessment of free-living physical activity. | | | | | |

| 8a. Module Occurrenc | 8a. Module Occurrence to which this MDF Refers | | | | |
|----------------------|--|---|----------|------------------|--|
| Year | Occurrence | | Location | Mode of Delivery | |
| 2025/6 | ZZF | Template For Face To Face Learning Delivery | | Face to Face | |

| 8b. Learning Activities for the above Module Occurrence | | | | | |
|---|-------|-------------------|--|--|--|
| Learning Activities | Hours | Learning Outcomes | Details of Duration, frequency and other comments | | |
| Lectures | 24 | 1-4 | Lectures 2 hours per week | | |
| Other teacher managed learning | 12 | 1-4 | Seminars 1 hour per week | | |
| Student managed learning | 114 | 1-4 | Completion of weekly readings, tasks and preparation for assessments | | |
| TOTAL: | 150 | | | | |

9. Assessment for the above Module Occurrence

| Assessment No. | Assessment Method | Learning Outcomes | Weighting (%) | Fine Grade or Pass/Fail | Qualifying Mark (%) |
|-------------------|-------------------|----------------------|---------------|----------------------------|------------------------|
| 010 | Coursework | 2,4 | 50 (%) | Fine Grade | 30 (%) |

Written Review (1500 words)

| Assessment No. | Assessment Method | Learning Outcomes | Weighting (%) | Fine Grade or Pass/Fail | Qualifying Mark (%) |
|-------------------|-------------------|----------------------|---------------|----------------------------|------------------------|
| 011 | Practical | 1,3 | 50 (%) | Fine Grade | 30 (%) |

A 15 minute presentation on the design of an exercise intervention to prevent, manage, or reverse a chronic health condition (1500 word equivalent)

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7*).

In addition, students are required to:

- (a) achieve the qualifying mark for each element of fine graded assessment as specified above
- (b) pass any pass/fail elements

[* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]