

# **MODULE SPECIFICATION**

| Part 1: Information       |                          |   |                                    |    |  |  |
|---------------------------|--------------------------|---|------------------------------------|----|--|--|
| Module Title              | Foun                     | Foundations of Exercise Prescription              |                                    |    |  |  |
| Module Code               | UZYł                     | (KG6-30-1 Level 4                                 |                                    |    |  |  |
| For implementation from   | Septe                    | mber 2021   |                                    |    |  |  |
| UWE Credit Rating         | 30 ECTS Credit<br>Rating |   | ECTS Credit<br>Rating              | 15 |  |  |
| Faculty                   | Healt<br>Scier           | h and Applied<br>Ices                             | pplied Field Allied Health Profess |    |  |  |
| Department                | Allied                   | ed Health Professions                             |                                    |    |  |  |
| Contributes towards       | BSc (                    | Sc (Hons) Sport Rehabilitation- Compulsory Module |                                    |    |  |  |
| Module type:              | Stand                    | Standard  |                                    |    |  |  |
| Pre-requisites            |                          | None  |                                    |    |  |  |
| Excluded Combinations     |                          | None  |                                    |    |  |  |
| Co- requisites            |                          | None  |                                    |    |  |  |
| Module Entry requirements |                          | None  |                                    |    |  |  |

## Part 2: Description

This module will introduce the student to the foundations of exercise prescription, through a range of lectures, seminars and practical classes and workshops.

The syllabus will typically cover:

## Exercise

Types of exercise (e.g. prevention, therapeutic, conditioning, social)

Biopsychosocial benefits of exercise for specific populations (e.g. children, adults, older adults, elite athletes) Goal setting, motivation, adherence

Principles of prescription (to include risk assessment and incident reporting) for individual and group exercise Components of fitness (what is it, how is it assessed, exercises to improve):

- Cardiovascular fitness
- Balance and proprioception
- Flexibility
- Strength

### **Biomechanics**

Mechanics of movement to include:

- Cardinal planes and axes
- Torque
- Levers

- Stress/strain and soft tissue mechanics (e.g. viscoelasticity)
- Muscle range (e.g. optimal length, active and passive tension) •
- Group action of muscles (e.g. neutralisers, stabilisers)
- Length-tension relationships

#### Movement analysis for functional and sporting activities

- Integration of the mechanical principles to analyse: gait, running, sit to stand, jumping, gripping, reaching, throwing
- Identification of abnormal movement with subsequent exercise prescription
- Use of biomechanical principles to justify progressions/regression of exercises prescribed

| Generic Gr        | aduate Skill         | Specific strand<br>(eg<br>presentation) -<br>Optional | Introduced  | Developed | Evidenced |
|-------------------|----------------------|---|-------------|-----------|-----------|
| 1. Comr           | nunication           |   | $\boxtimes$ |           |           |
| 2. Profe          | ssionalism           |   | $\boxtimes$ |           |           |
| 3. Critic         | al Thinking          |   | $\boxtimes$ |           |           |
| 4. Digita         | I Fluency            |   | $\boxtimes$ |           |           |
| 5. Innov<br>Enter | ative and<br>prising |   |             |           |           |
| 6. Forwa          | ard Looking          |   | $\boxtimes$ |           |           |
| 7. Emot           | ional Intelligence   |   | $\boxtimes$ |           |           |
| 8. Globa          | ally Engaged         |   |             |           |           |

#### Part 3: Assessment

**Component A:** Maximum 45 minute Structured Oral Practical Exam (SOPE) at the end of semester 2.

This approach will enable assessment of systematic movement analysis and the application of this in selecting and teaching appropriate exercises. It will also allow assessment of the learning outcomes related to practical skills. The SOPE will include questions to assess the students' movement analysis skills (based on video clips of movements used within the module) and require students to systematically analyse the movement, describe the dysfunction and prescribe justified exercises to target the dysfunction.

Component B: 2000 word case report at the end of semester 1.

A written case report will allow in depth assessment of a specific aspect of exercise prescription and allow the development of technical writing in preparation for level 2. Students will be assigned a case study relating to a specific aspect of fitness (e.g. cardiovascular, balance and proprioception, strength, flexibility) and will present a written report of an exercise regimen for a given patient/client. This will be based on a proforma provided, which is similar to those used in practice, and will include justification for the inclusion of each exercise using theory and relevant sources.

## **Formative Assessment**

Students will be provided with feedback during practical classes and seminar discussions and activities throughout the module, in addition to a module workbook.

| Identify final timetabled piece of assessment (component and element) | Component A |  |           |
|---|-------------|--|-----------|
| % weighting between components A and B (Standard modules only)        |             |  | B:<br>50% |
|   |             |  |           |
| First Sit   |             |  |           |

| Component A (cont<br>Description of each     |   | Element weighting<br>(as % of component) |  |  |
|--|---|--|--|--|
| 1. Structured Oral P                         | 100%  |  |  |  |
| Component B<br>Description of each           | Element weighting<br>(as % of component)  |  |  |  |
| 1. Case Report- 200                          | 100%  |  |  |  |
| Resit (further atten                         | dance at taught classes is not required)  |  |  |  |
| Component A (cont<br>Description of each     |   | Element weighting<br>(as % of component) |  |  |
| 1. Structured Oral P                         | ractical Exam (SOPE)- Maximum 45 minutes  | 100%                                     |  |  |
| Component B<br>Description of each           | element   | Element weighting<br>(as % of component) |  |  |
| 1. Case Report- 200                          |   | 100%                                     |  |  |
|  | Part 4: Learning Outcomes & KIS Data  |  |  |  |
| Learning<br>Outcomes                         | On successful completion of this module students will be al   |  |  |  |
|  | <ul> <li>Demonstrate knowledge and understanding of the physiological responses of the<br/>nervous, musculoskeletal, cardiovascular and respiratory systems in response to<br/>exercise, and recovery from exercise. (Components A and B)</li> </ul>  |  |  |  |
|  | <ul> <li>Analyse and discuss basic functional (and sporting) human movement and<br/>compare variations in human movement using biomechanical principles.<br/>(Components A and B)</li> </ul>  |  |  |  |
|  | <ul> <li>Demonstrate skills in writing, organising, delivering, managing and monitoring ar<br/>exercise programme in healthy populations ensuring personal, peer and service<br/>user safety. (Components A and B)</li> </ul>   |  |  |  |
|  | <ul> <li>Prescribe an exercise programme to address variations from efficient human movement or improve a component of health and fitness. (Components A and Recognise the benefits of activity in the maintenance of health within a biopsychosocial model and state the recommended levels of activity to main health across a variety of age ranges. (Components A and B)</li> </ul> |  |  |  |
|  |   |  |  |  |
|  | <ul> <li>Outline factors affecting motivation and adherence<br/>and active lifestyle and identify methods to increase<br/>(Components A and B)</li> </ul>   |  |  |  |
| Key Information<br>Sets Information<br>(KIS) |   |  |  |  |
| Contact Hours                                |   |  |  |  |

|                  | Key Infor  | mation Set - Mo                      | odule data     |                       |                    |   |  |  |
|------------------|--|--------------------------------------|----------------|-----------------------|--------------------|---|--|--|
|                  |  |                                      |                |                       |                    |   |  |  |
|                  | Number   | of credits for this                  | s module       |                       | 30                 |   |  |  |
|                  |  |                                      |                |                       |                    |   |  |  |
| Total Assessment | Hours to be  | Scheduled<br>learning and            | Independent    | Placement study hours | Allocated<br>Hours |   |  |  |
|                  | allocated  | -                                    | study nours    | Study nours           | nouis              |   |  |  |
|                  | 300  | 96                                   | 204            | 0                     | 300                |   |  |  |
|                  |  |                                      |                |                       |                    |   |  |  |
|                  | constitutes a;<br>Written Exam: Unseen or open book written exam<br>Coursework: Written assignment or essay, report, dissertation, portfolio, project or in class<br>test<br>Practical Exam: Oral Assessment and/or presentation, practical skills assessment,<br>practical exam (i.e. an exam determining mastery of a technique) |                                      |                |                       |                    |   |  |  |
|                  |  | Total assessm                        | ent of the mod | ule:                  |                    |   |  |  |
|                  |  |                                      |                |                       |                    | _ |  |  |
|                  | -  | Written exam assessment percentage   |                |                       | 0%                 | _ |  |  |
|                  |  | Coursework assessment percentage     |                |                       | 50%                | _ |  |  |
|                  |  | Practical exam assessment percentage |                |                       | 50%                |   |  |  |
|                  |  |                                      |                |                       | 100%               |   |  |  |
|                  |  |                                      |                |                       |                    |   |  |  |
| Reading List     | Foundations of E   | xercise Prescri                      | otion Reading  | <u>List</u>           |                    |   |  |  |

## FOR OFFICE USE ONLY

| First Approval Date (and panel type)  | Date of first {panel} approval |         |   |             |
|---|--------------------------------|---------|---|-------------|
| Revision ASQC<br>Approval Date<br>Update this row each<br>time a change goes to<br>ASQC |                                | Version | 1 | Link to RIA |