

# REHA 3007 EXERCISE PRESCRIPTION II

**Credit Points** 10

**Legacy Code** 401144

**Coordinator** Carolina Sandler ([https://directory.westernsydney.edu.au/search/name/Carolina Sandler/](https://directory.westernsydney.edu.au/search/name/Carolina%20Sandler/))

**Description** This subject focuses on the role of exercise in the functional rehabilitation of musculoskeletal injuries including work and sporting injuries. It covers injury and re-injury prevention strategies; mechanisms of injury; patho-physiology of injury and repair process; design and evaluation of rehabilitation exercise programs; how the exercise program functions in concert with other methods of injury treatment and management; important pharmacological, communication, psychosocial and cultural considerations; the role of the exercise physiologist in the rehabilitation team; the effects of nervous system disorders and injury on skeletal muscle control, injury and rehabilitation are also considered.

**School** Health Sciences

**Discipline** Rehabilitation Therapies, Not Elsewhere Classified.

**Student Contribution Band** HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees ([https://www.westernsydney.edu.au/currentstudents/current\\_students/fees/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 3 subject

**Pre-requisite(s)** HLTH 2005

**Equivalent Subjects** REHA 3011 - Exercise in Musculoskeletal Injury Rehabilitation REHA 3012 - Exercise in Musculo-Skeletal Rehabilitation

## Restrictions

Students must be enrolled in 4658 - Bachelor of Health Science (Exercise and Sport Science).

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Describe the scope of practice of an accredited clinical exercise physiologist with respect to musculoskeletal injury rehabilitation.
2. State and utilise methods of reducing injury potential in a variety of sports and exercise programs.
3. Understand the causative mechanisms and pathophysiology of musculoskeletal injury and healing as related to each body region.
4. Develop an awareness of the fundamental approaches and complications associated with treatment of common musculoskeletal injuries, including pharmacological management.
5. Apply principles of functional assessment and exercise rehabilitation in the design and implementation of rehabilitation exercise programs for individuals with musculoskeletal injuries and chronic pain conditions.
6. Modify an exercise program within the context of the biopsychosocial model of rehabilitation.
7. Quantify self report scales for assessment of disability, pain, depression, anxiety, and kinesiophobia.
8. Utilise communication skills regarding exercise prescription technique for effective interpersonal relationships with clients,

and other professionals involved in musculoskeletal injury rehabilitation.

## Subject Content

1. Acute and chronic responses to injury, repair and remodelling.
  - haemostatic and inflammatory responses
  - muscle, bone, ligament and tendon
  - Affects of injury and functional rehabilitation on the Biomechanical properties of muscle, bone, ligament and tendon
  - changes in kinaesthetic sensitivity that accompany soft tissue injuries
2. Acute care for musculoskeletal injuries
3. Pharmacology of key medication for musculoskeletal injury and common coexisting conditions
4. Principles of functional assessment
  - Medical clearances
  - Common tests of functional ability used in screening for musculoskeletal injury, their uses, strengths and limitations
5. Principles and stages of functional rehabilitation
6. Rehabilitation Techniques
  - Hydrotherapy
  - Therabands
  - Fitball
  - Resistance
  - Endurance Training
  - Flexibility
  - Core Stability
  - Progression and evaluation
7. Design and implementation of functional rehabilitation exercise programs for individuals with common musculoskeletal injuries
  - Head and neck
  - Upper limb
  - Lower Limb
  - Torso and back
8. Functional exercise rehabilitation's relationship to other treatments
9. Risks of injury associated with equipment and exercises used in functional rehabilitation of musculoskeletal injuries
  - The biomechanics
  - Minimising risk
10. Equipment and environment
11. The exercises and technique
12. Individual client factors
13. Sociocultural and health factors and functional rehabilitation, taking into account
  - Age
  - Gender
  - co-existing conditions
  - medications
  - sociocultural and lifestyle factors etc
14. Evaluating the efficacy of functional rehabilitation programs
15. The professional responsibilities and limitations of ESSA accredited exercise scientists and exercise physiologists in exercise/sports medicine and injury rehabilitation
16. The psychological impact of injury
  - implications for rehabilitation
17. The team approach in sports medicine and musculoskeletal rehabilitation; coach and players, conditioners, assistants, medico, physiotherapist, consultants, the workers compensation team
18. Overuse injuries and functional rehabilitation

## Special Requirements

Legislative pre-requisites

To be eligible to enrol in this subject, students must submit and had processed:

- 1) a valid and current Working with Children Check.

2) a valid and current First Aid Certificate from a Registered Training Organisation.

Use the link to the Special Requirements web page below for more information.

Special requirements ([https://www.westernsydney.edu.au/currentstudents/current\\_students/enrolment/special\\_requirements/](https://www.westernsydney.edu.au/currentstudents/current_students/enrolment/special_requirements/))

## Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Final Exam	2 hours	40	N	Individual
Essay	1,500 words	30	N	Individual
Case Study	1,000 words	30	N	Individual

Teaching Periods

## Autumn (2022)

### Campbelltown

#### Day

**Subject Contact** Peter Clothier ([https://directory.westernsydney.edu.au/search/name/Peter Clothier/](https://directory.westernsydney.edu.au/search/name/Peter%20Clothier/))

View timetable ([https://classregistration.westernsydney.edu.au/even/timetable/?subject\\_code=REHA3007\\_22-AUT\\_CA\\_D#subjects](https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=REHA3007_22-AUT_CA_D#subjects))

## Autumn (2023)

### Campbelltown

#### On-site

**Subject Contact** Peter Clothier ([https://directory.westernsydney.edu.au/search/name/Peter Clothier/](https://directory.westernsydney.edu.au/search/name/Peter%20Clothier/))

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