



ADVANCED STRENGTH & CONDITIONING FOR REHABILITATION

DR CLAIRE MINSHULL

REHABILITATION & CONDITIONING
SPECIALIST

NOV 21-22 2025

INTERNATIONAL KNEE AND JOINT CENTRE
ABU DHABI

AN ADVANCE COURSE ON STRENGTH & CONDITIONING FOR REHABILITATION

It is expected that participants will possess a basic knowledge of strength and conditioning and exercise prescription. This will ensure an optimal learning experience

TITLE

Advanced Strength & Conditioning For Rehabilitation; Harnessing Scientific Principles To Optimise Outcomes

COURSE PHILOSOPHY

This course is predicated on one key principal

HARNESSING THE EVIDENCE BASE

Many neuromuscular and strength and conditioning strategies that have demonstrated efficacy in enhancing conditioning status within sports and athletic performance-based science offer equivalent opportunities within rehabilitating settings. Yet, many of these simple evidence-based strategies fail to be deployed in normal clinical practice. Here we critique the scientific literature from a rehabilitation perspective and distill it down to provide a toolbox of useful, evidence-based techniques that practitioners can immediately use with patient groups to accelerate rehabilitation outcomes.

PARTICIPANTS

This course has been delivered internationally to a range of professionals within the fields of Musculoskeletal Rehabilitation, Sports Medicine, Osteopathy, Strength and Conditioning, Occupational Therapy. This course is relevant to practitioners of physiotherapy / physical therapy, strength and conditioning and allied rehabilitation professions, including, sports therapy, osteopathy, and those involved in exercise prescription. It will also be applicable to physicians with an interest in exercise-based therapy.

CONTENT

Delivery of high quality, often high-intensity resistance exercise is key to enhancing muscle force producing capabilities. Often there are challenges associated with delivery of this type of exercise in deconditioned and, or, load-compromised patients. This course will cover the following concepts to enhance your understanding and to provide you useful strategies to use in clinic the very next day.

- **Exercise-induced muscle damage:** what is it, how is it caused, the consequences on neuromuscular performance and how to assess it
- **The repeated-bout effect:** how to design and deliver a curated episode of exercise prior to higher intensity exercise to reduce or eliminate the delayed-onset muscle soreness (DOMS) response
- **Hand-held dynamometry (HHD):** how to use HHD properly to accurately assess muscle strength performance
- **Cross-education:** how to implement this powerful strategy to attenuate injury/surgery-associated losses to strength performance
- **Blood flow restriction training:** the principles, clinical considerations and how to deliver in patient populations

PROGRAMME

The course is 2 days in duration. Each day comprises a mixture of practical sessions, conducted within a gym environment and theoretical and taught components, delivered within a classroom setting.

LEARNING OUTCOMES

By the end of this course you will be able to:

- Describe the physiological mechanisms and clinical consequences of exercise-induced muscle damage (EIMD), including the neuromuscular impairments
- Demonstrate proficiency in assessing muscle damage and recovery using validated tools, including patient-reported soreness scales and strength metrics.
- Demonstrate accurate assessment of muscle strength using hand-held dynamometry, and apply findings to inform clinical decision-making
- Explain the repeated-bout effect (RBE) and develop exercise strategies to minimise delayed-onset muscle soreness (DOMS) while preserving the eccentric exercise stimulus
- Explain the principles, physiological mechanisms, and safety considerations of blood flow restriction (BFR) training in clinical rehabilitation.
- Design and implement evidence-based BFR training protocols for patients unable to tolerate high mechanical loads, to maintain or enhance muscle strength and hypertrophy.
- Understand the cross-education effect and its relevance in clinical scenarios, particularly for unilateral injury or immobilisation.
- Design and implement rehabilitation programmes incorporating cross education principles, supported by evidence-based parameters such as intensity, frequency, and contraction type
- Integrate EIMD management, eccentric loading, BFR, cross-education, and strength assessment into comprehensive, patient-specific rehabilitation programmes aimed at optimising clinical outcomes

TUTOR

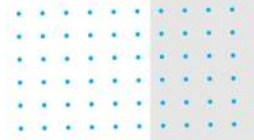
Dr Claire Minshull

Rehabilitation & Conditioning Specialist

Professor, School of Health, Leeds Beckett University

Claire is a leading expert in rehabilitation and conditioning science, with over 25 years of experience spanning clinical research, academia, and practice. She is the Founder of Get Back to Sport, an international education company focused on bridging the gap between exercise science and physiotherapy, and a Visiting Professor at Leeds Beckett University

Claire's work centres on neuromuscular function, joint stability, and the enhancement of rehabilitation strategies, with a special interest in osteoarthritis. She has published widely in peer-reviewed journals, led major clinical trials, and frequently advises healthcare organisations on evidence-based rehab practices. Her teaching and consultancy support clinicians and companies in applying the latest science to improve patient outcomes. Her recent work on dynamometry has significantly influenced the design and advancement of next-generation hand-held strength assessment devices





THANK YOU

*We are looking
forward to
seeing you in
the upcoming
course*

[Register Here](#)



Contact Us :

-  971 503826657
-  www.focuspro.ae
-  eventsfoucuspro@gmail.com
-  +971 501726286