

Therapeutic Exercise Science

(RHAB819) 15 points

Pathways, programmes/specialisations the paper is attached to

Postgraduate Certificate in Health Science, Master of Health Science, Postgraduate Diploma in Health Science, Master of Health Practice

Am I eligible to enrol in this paper?

The paper is for health professionals registered under the New Zealand HPCA Act, or for international physiotherapists who hold a Special Purpose Scope of Practice from the Physiotherapy Board of New Zealand. Students will normally have completed the requirements of one of the following in a relevant field from a New Zealand institution or equivalent:

- A bachelor's degree
- Professional qualification recognised by the university as being equivalent to a bachelor's degree
- Evidence of professional experience deemed by the university to be equivalent to a bachelor's degree

Where entry qualifications do not meet the criteria for study at postgraduate level, completion of transitional studies may be required before the applicant is admitted to the programme.

What is this paper about?

Explores and debates the scientific basis of exercise testing and prescription for special populations. Evaluates and applies current best practice of exercise testing and prescription, drawing on relevant contemporary literature to analyse underpinning neurological, skeletal and systemic pathophysiology, exercise testing strategies and exercise prescription.

What can I expect to learn?

- Physiology and pathology of deconditioning in different body systems as a result of immobilization, illness, weakness and fatigue.
- Physiological and functional assessment and analysis of deconditioning in specific populations.
- Resistance, aerobic, functional and power training for deconditioning in specific populations.
- Instability and the role exercise intervention.
- Identification and modification of risk factors, contraindications and precautions to exercise in special populations.
- Efficacy of interventions designed to enhance capacity for activity, exercise and movement.
- Strategies to enhance adherence to exercise prescription.

How is this paper taught?

Location: On campus at AUT North, AUT University
Teaching Period(s): Semester 1
Block Course: Yes

How will I be assessed?

1. Two Practical Laboratory Exercises, 2,000 words in total
2. Written assignment 3,500 words

Who will be teaching me?

Paper Coordinator: Grant Mawston, PhD, PgDipHsc (Manip Therapy), BPhys, BPhed, MNZSP

Grant is a Senior Lecturer for the Department of Physiotherapy and Board Member of the Health and Rehabilitation Research Institute at AUT University. He teaches in the field of biomechanics, exercise rehabilitation, and applied physiology. Grant has an active research interest in the neuromuscular control of the lumbar spine. He has also been involved in research investigating the measurement of physical activity in people with multiple sclerosis, exercise interventions for Parkinson's disease, neuromuscular control in Down Syndrome, and cardiorespiratory and strength assessment of people with arthritic conditions. Other areas of sporting research have included biomechanical assessment of elite kayakers and fatigue measures for cyclists. Grant currently runs the Pre-operative Cardiopulmonary Testing Unit for the physiological assessment of high-risk surgical patients at North Shore Hospital. In the past Grant has been the physiotherapist for New Zealand Gymnastics, and currently works part-time as a musculoskeletal physiotherapist.

Fees

Information about paper tuition fee for papers may be found at:

<http://www.aut.ac.nz/study-at-aut/fees-scholarships-and-finance/fees/postgraduate-fees>

Enrolment and enquires

New to AUT? Please submit an application for a programme on the AUT <https://www.aut.ac.nz/study/applying>.

When you are a confirmed student you will be able to indicate your paper selection. Any questions about applying to AUT please contact Debra Spinetto – fhes.enquiries@aut.ac.nz

Please contact Debra Spinetto for any enquiries about enrolment. Current students will receive an re-enrolment email each year – any enquiries please contact fhes.administration@aut.ac.nz

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