

# Ultrasound Imaging – Paramedicine

(RADY801)

## Pathways, programmes/specialisations the course is attached to

AK3484 Postgraduate Certificate in Health Science

AK3487 Postgraduate Diploma in Health Science

AK3485 Master of Health Science

AK3733 Master of Health Practice

## Am I eligible to enrol in this course?

This paper is for health professionals who will have completed the requirements for one of the following qualifications or has extensive experience in a relevant field from a New Zealand tertiary institution or equivalent institution:

- A bachelor's degree
- Professional qualification recognized 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 program.

## What is this course about?

This course aims to give the learner an introduction to the broad scope and application of point of care ultrasound in the prehospital setting. It explores the theory and principles of ultrasound imaging physics, ultrasound anatomy, ultrasound instrumentation and clinical practice.

## What can I expect to learn?

As a student enrolled in this course you can expect to learn the following principles pertinent to using ultrasound. It is expected you will be able to:

- Develop an understanding of the physical principles of ultrasound imaging and instrumentation through basic imaging terminology, wave propagation, tissue imaging principles, transducer technology, image artifacts, doppler principle
- Demonstrate an understanding of the knowledge and principles of ultrasound instrumentation and theory with reference to scientific research evidence
- Identify, evaluate and justify the implications and use of ultrasound imaging
- Critically analyse literature pertinent to ultrasound imaging and assimilate findings into clinical imaging, assessment and practice
- Recognise and understand the dangers and contraindications to ultrasound imaging

## How is this course taught?

**Location:** Distance learning

**Teaching Period(s):** Semester 2

**Block Course:** 2-day South Campus block

**Clinical Placements:** On request

## How will I be assessed?

1. Written Assignment 2000 words
2. Written Assignment 3000 words

### **Who will be teaching me?**

**Course Coordinator:** Hannah Latta, MHealSc (AeroRT), DHSc candidate

Hannah Latta is an Intensive Care Flight Paramedic with over 15 years' experience working for Wellington Free Ambulance on the Life Flight Westpac Rescue Helicopter. Hannah's passion is point of care ultrasound and the development of ultrasound within paramedical practice in New Zealand. Hannah is currently working towards her doctorate with a study investigating the use of ultrasound in PEA cardiac arrest to identify the incidence of pseudo-PEA. Hannah also works in the Wellington Emergency department as a volunteer performing ultrasound alongside the emergency department Doctors.

**Course Leader:** Richard Ellis.

Richard is an Associate Professor in the Department of Physiotherapy at Auckland University of Technology (AUT) in New Zealand. He teaches on both the undergraduate and postgraduate programmes in the fields of musculoskeletal physiotherapy, manual and manipulative therapy, ultrasound imaging and research. Richard is also a Co-Director of the Health and Rehabilitation Research Institute (HRRI) at AUT, leading the Active Living and Rehabilitation: Aotearoa New Zealand research group within HRRI. External to AUT, Richard is a Senior Tutor with the New Zealand Manipulative Physiotherapists Association (NZMPA) and is the Member Organisation delegate representing NZMPA within the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT). He is also an Associate Editor for the New Zealand Journal of Physiotherapy.

### **Fees**

Information about course tuition fees may be found at:

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

### **Enrolment and enquires**

Please contact Debra Spinetto for any enquiries about enrolment. Further information about our postgraduate offerings may be found online.

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