How Bond University Doctor of Physiotherapy Students have been prepared for their Cardiorespiratory Clinical Placement

Previous learning: In addition to completing previous coursework in the core areas of Neurological and Musculoskeletal physiotherapy, students have also completed the following coursework subject:

- *Cardiorespiratory Physiotherapy (PHTY71-403)*

The main knowledge and skills covered in this subject are outlined below.

KNOWLEDGE AREAS	PRACTICAL SKILLS

• Anatomy and physiology of respiration (the principles of oxygen transport) and the cardiovascular system
• Principles of pharmacological management of respiratory cardiovascular conditions
• Epidemiology, aetiology, pathophysiology, diagnosis, prognosis, signs and symptoms and medical and physiotherapy management of asthma, chronic obstructive pulmonary disease, pneumonia, bronchiolitis, bronchiectasis, cystic fibrosis, cancer of lung and abdomen, atherosclerosis (including coronary artery disease and peripheral vascular disease and stroke), acute coronary syndrome, cardiac valve disease, congestive heart failure, and congenital cardiac conditions
• Indications, pre-operative medical evaluation, procedure, complications and physiotherapy management of patients post abdominal pulmonary surgery and cardiac surgery
• Assessment and treatment of a child with respiratory problems
• Introduction to the Intensive Care Unit across the lifespan including concepts of mechanical ventilation and tracheal intubation
	• Identification of important cardiorespiratory anatomical features on chest x-ray and other imaging media
	• How to use a systematic approach to chest radiograph interpretation
	• How to use spirometers (including issues related to reliability and validity)
	• Role of the physiotherapist in pulmonary rehabilitation
	• How to perform a physiotherapy respiratory and cardiac assessment including:
	  ○ Interpretation of diagnostic imaging and laboratory tests (including arterial blood gases)
	  ○ History taking
	  ○ Physical examination including auscultation, palpation, cough and mobility and functional capacity assessments, exercising blood pressures
	  ○ Use of specific outcome measures e.g., six- minute walk test, oxygen saturation monitoring
	• Interpretation of results of history taking and physical examination to plan an effective treatment program

• Introduction to pulmonary rehabilitation and the three phases of cardiac rehabilitation • Introduction to basic ECG interpretation • Assessment and management of clients with combined cardiorespiratory and cardiovascular disorders	• Pre-operative assessment and education of the cardiac surgery patient • Assessment and mobilisation of a patient post abdominal surgery, thoracic, cardiac surgery (including use of oxygen therapy) and post lower limb amputation • Mobilising and positioning of a patient post CVA • Assessment and treatment of the patient in ICU (including early mobility, use of tilt table, suctioning and manual hyperinflation) • Application of safe practice for physiotherapy interventions in ICU and on the ward including patient mobility on the stairs • Ability to perform selected airway clearance techniques • Ability to teach an effective cough in acute respiratory illness • Brief intervention on smoking cessation • Pre-operative Physiotherapy assessment and management • Exercise prescription in cardiac rehabilitation • Communication skills (written and verbal)