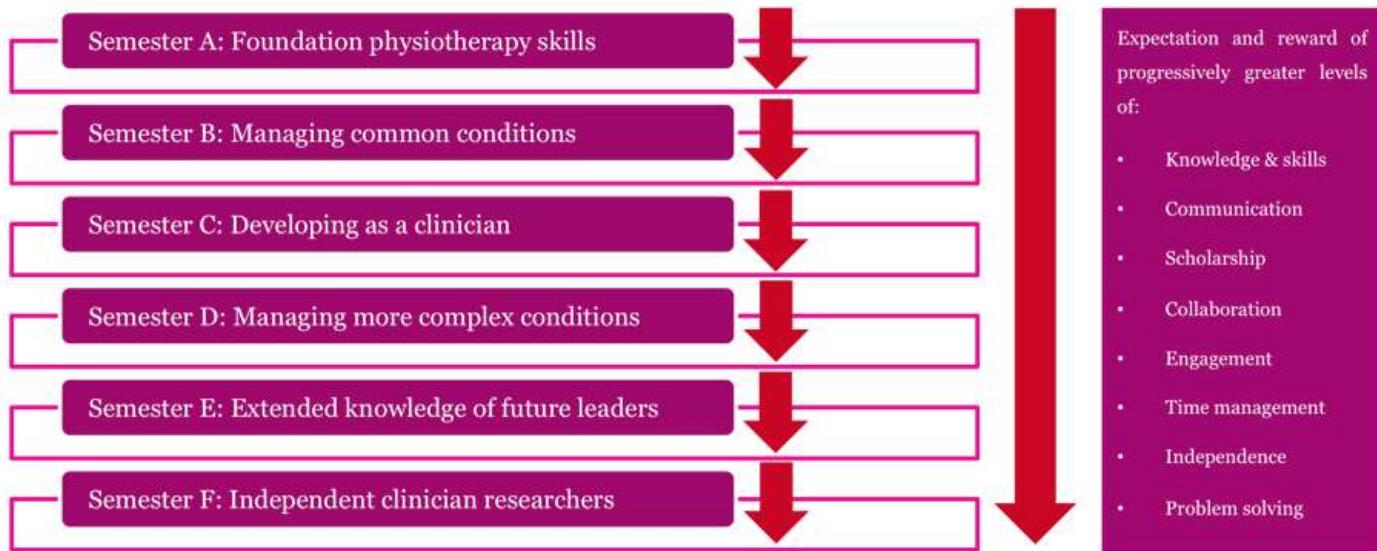


Doctor of Physiotherapy

PROGRAM STRUCTURE



Semester A: Foundation physiotherapy skills

At the completion of this semester students will understand person-centred healthcare and be able to identify and manage impairments, activity limitations and participation restrictions that are non-specific to a region of the body or disease/diagnosis.

Semester B: Managing common conditions

At the completion of this semester students will be able to demonstrate the knowledge and skills to assess and provide evidence based management for patients with common relatively simple musculoskeletal, neurological and cardiorespiratory conditions.

Semester C: Developing as a clinician

At the completion of this semester students will have demonstrated ability to assess and manage patients with a range of common relatively simple conditions that present to physiotherapists in acute care, rehabilitation and primary care settings.

Semester D: Managing more complex conditions

At the completion of this semester students will demonstrate the advanced knowledge and skills required to manage more complex conditions and a wider spectrum of patients including children, older people, athletes, workers and those with chronic disease or chronic pain and long-term disabling conditions.

Semester E: Extended knowledge of future leaders

At the end of this semester students will demonstrate extended knowledge in business management, leadership and new areas of practice, beyond that expected of a graduating physiotherapist, preparing them to be leaders in their profession. They will also demonstrate an ability to design a research project relevant to physiotherapy.

Semester F: Becoming an independent clinician and researcher

At the end of this semester students will have demonstrated the ability to complete a research project relevant to physiotherapists and to manage more complex conditions and at a higher level than would be expected of a graduating physiotherapist.

Appendix 2: The Macquarie University DPT Pain Curriculum Mapping Chart

This chart documents the mapping of each element of the IASP Pain Curriculum for Physical Therapy at the level of specific units across the 3-year Macquarie DPT program. iLearn is the institutional online Learning Management System, and the online Pain Education iLearn unit is a resource for staff and students to support their pain education.

| Undergraduate | | Year 1 | | Year 2 | | Year 3 | | ILearn Resources | |
|--|--|--------|--|--------|--|--------|--|------------------|--|
| Prerequisite and Assumed Knowledge | | | | | | | | | |
| <p>Mode and duration of instruction per week</p> <p>A. Magnitude of the problem: epidemiology of pain as a public health problem with social, ethical, and economic considerations.</p> <p>B. Current theories of the anatomical, physiological, and psychological basis of pain and pain relief.</p> <p>C. Definition of pain and the multidimensional nature of the pain experience.</p> <p>D. Impact of age, gender, family, culture, spirituality, and the environment on the pain experience</p> <p>E. Roles and responsibilities of the physical therapist in pain management and the integration of physical therapy into the interdisciplinary pain team.</p> <p>F. Roles and responsibilities of other health care professionals in the area of pain management and the merits of interdisciplinary collaboration.</p> <p>G. Integration of physical therapy interventions into a holistic management strategy in collaboration with other professions (health and non-health).</p> <p>H. Pain across the life span (physiological and psychological, educational and social development, psycho-social factors, and integrative models of pain).</p> <p>I. Implications and assessment of pain in infancy, childhood, and adolescence with reference to pain processing, education and social development, and integration into the management strategy.</p> <p>J. Specific problems faced by the elderly with painful conditions with respect to the influence of co-morbidities, access to appropriate services, and maintenance of independence.</p> <p>K. 1. Understand and describe nociception in different tissue types (i.e. skin, muscle, joint, visceral). Explain the afferent interneurons of the spinal cord from different tissue types, and how pain from different tissue is processed centrally.</p> <p>L. 2. Define and describe peripheral sensitization and how these changes are associated with pain perception.</p> <p>M. 3. Describe neuropeptides, the neurotransmitters involved in pain, and how these neurotransmitters could contribute to peripheral pain processing.</p> <p>N. 4. Understand the changes and role of ion channels, excitatory neurotransmitters, and inhibitory neurotransmitters in the peripheral nervous system and in non-neuronal cells, and explain how these changes are important in the processing of pain transmission.</p> <p>O. 5. Describe animal models of pain. Understand what the models are trying to mimic, and why one would use an animal model to study pain.</p> <p>P. 6. Describe the pain pathways involved in the sensory discriminative and motivational/affective component of pain.</p> <p>Q. 7. Describe and define central sensitization and how this is similar and different from peripheral sensitization.</p> <p>R. 8. Describe and understand the mechanisms that underlie pain behaviors: referred pain, primary hyperalgesia, secondary hyperalgesia, allodynia.</p> <p>S. Understand the role of excitatory neurotransmitters, inhibitory neurotransmitters, and pain in the central nervous system in enhancement of pain transmission, and changes that occur as a result of tissue injury.</p> <p>T. Basic Science</p> | | | | | | | | | |
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| Undergraduate | | Year 1 | | | | | | | | | | Year 2 | | | | | | | | | | ILearn Resources | | | | |
|--|--|---|--|--|--|--|------------|--|--|--|--|------------|--|--|--|--|------------|--|--|--|--|------------------|--|--|--|--|
| | | Semester A | | | | | Semester B | | | | | Semester C | | | | | Semester D | | | | | Semester E | | | | |
| Prerequisite and Assumed Knowledge | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G. Interpret, critically appraise reliability, validity, and responsiveness) and implement available pain assessment instruments for: | | 1. Screening for the development of chronic conditions | | | | | | | | | | | | | | | | | | | | | | | | |
| H. Understand the need to monitor and review the effectiveness of treatment/management and modify treatment and management strategies appropriately. | | 2. Identifying accepted patient subgroups for application of treatment. | | | | | | | | | | | | | | | | | | | | | | | | |
| I. Understand the need to refer to relevant health professional as appropriate and in a timely manner. | | 3. Determining clinical relevance and/or magnitude of patient outcomes | | | | | | | | | | | | | | | | | | | | | | | | |
| | | A. Demonstrate an ability to integrate the patient assessment into an appropriate management plan using the concepts and strategies of clinical reasoning. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | B. Understand the principles of an effective therapeutic patient/professional relationship to reduce pain, promote optimal function and reduce disability through the use of active and where appropriate, passive pain management approaches. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | C. Assist patients to develop a daily routine to support achievement and, where necessary, readjustment of habits and roles according to individual capacity and fe situation. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | D. Understand the need to involve family members and significant others including employers where appropriate. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | E. Use a person-centred perspective to formulate collaborative intervention strategies consistent with a physical therapy perspective. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | a. non-opioid medications | | | | | | | | | | | | | | | | | | | | | | | | |
| | | b. opioids | | | | | | | | | | | | | | | | | | | | | | | | |
| | | c. adjuvants | | | | | | | | | | | | | | | | | | | | | | | | |
| | | d. topical analgesics and local anaesthetics | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F. Understand appropriate pharmacology 1. Understand the principles of the pharmacology of medications used to treat pain: | | | | | | | | | | | | | | | | | | | | | | | | |
| | | F. Understand appropriate pharmacology 2. Understand the limitations of the pharmacological management of chronic pain, the importance of combining pharmacological approaches with non-pharmacological management of chronic pain and the use of such strategies alongside appropriate evidence-based active self management strategies. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 1. Recognise the impact of and evidence for the use of the explicit, evidence based educational and self-management as a critical part of pain management. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2. Design and apply appropriate educational strategies based on educational science. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 3. Identify the range of educational opportunities available across therapeutic domains (e.g., injury, disease, medical and cultural) and scope of intervention with consideration of age, gender. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 4. Consider the scope and evidence for/against various contemporary therapeutic educational styles (e.g., biomedical, psychological, neuroscience) and models (e.g. stages of change theory) and service delivery modes including face-to-face, web-based, group education. | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5. Identify key variables which may impact on knowledge outcomes or the patient (e.g. self-efficacy, health literacy, communication culture), the message (e.g. use of multimedia), and the context (e.g. audience motivation, risk reduction, injury | | | | | | | | | | | | | | | | | | | | | | | | |
| | | G. Patient Education | | | | | | | | | | | | | | | | | | | | | | | | |

| | | YEAR 1 | | YEAR 2 | | YEAR 3 | | YEAR 4 | |
|------------------------------------|--|--|--|---|--|--|--|---|--|
| UNDERGRADUATE | | Semester A | | Semester B | | Semester C | | Semester D | |
| | | | | | | | | | |
| Prerequisite and Assumed knowledge | | PHTY 800 Foundation Physiotherapy | | PHTY 801 Foundation Physiotherapy | | PHTY 802 Foundation Practice of Physiotherapy | | PHTY 803 Interpreting Healthcare Professionalism | |
| III. Management | | 1. Understand and apply functional behavioural analysis of pain conditions. | | 2. Appraise the value of screening tools in the identification of psychosocial factors predictive of persistent disability. | | 3. Apply behavioural approaches (physical and cognitive behavioural components) and evaluate the effects. | | 4. Identify the parameters (i.e., mode, frequency, duration, intensity) of therapeutic exercise for pain relief. | |
| Behavioural management | | 1. Exercise | | 2. Describe how to modify exercise parameters as they relate to the pain condition, age, psychosocial factors, and patient's health status. | | 3. Recognize the importance of implementing adjunct therapies to address issues related to exercise prescription (i.e., biopsychosocial fear avoidance behaviour, catastrophizing, cognitive behavioural therapy). | | 4. Understand the importance of patient education in prescribing therapeutic exercise, including the concept of motivation, pacing to enhance overall treatment effectiveness and compliance. | |
| Reintegration into work | | 1. Identify the factors associated with prolonged work loss and integrate strategies to overcome barriers to return to work. | | 2. Understand the role of ergonomic principles, modified workplace accommodations | | 3. Develop a management plan in co-ordination with employers and case managers. | | 4. For the following interventions: | |
| | | K. For the following interventions: | | 1. Manual Therapy (massage, manipulation, mobilization) | | 2. Acupuncture | | 3. Transcutaneous electrical nerve stimulation (TENS, IFC | |
| | | L. Understand the proposed neurophysiological or biomechanical mechanisms and the associated effects of the intervention in its pertinence to pain management. | | 4. Laser application and current evidence for the intervention in the management of different pain conditions | | 5. Relaxation | | 6. Biofeedback | |
| | | 1. Low back and neck pain | | 2. Arthritis | | 3. Headache and migraine | | 4. Cancer pain | |
| I LEARN RESOURCES | | Semester E | | Semester F | | | | | |
| | | PHY 801 Dissemination and Researcher Preparation | | PHY 802 Advanced Leadership and Advocacy | | PHY 818 Leadership, Research and Training | | PHY 819 Advanced Leadership and Advocacy | |
| | | PHY 816 Business and Law | | PHY 817 Advanced Practice Physiotherapy | | PHY 818 Business and Society | | PHY 819 Advanced Leadership and Advocacy | |
| | | PHY 820 Clinical Placement I | | PHY 821 Clinical Placement II | | PHY 822 Health and Wellbeing Across Lifespan A | | PHY 823 Health and Wellbeing Across Lifespan B | |
| | | PHY 824 Health and Wellbeing Across Lifespan B | | PHY 825 Professional Development | | PHY 826 Practice and Professional Development | | PHY 827 Professional Development | |
| | | PHY 828 Clinical Placement III | | PHY 829 Clinical Placement IV | | PHY 830 Clinical Placement V | | PHY 831 Research Project | |
| | | PHY 832 Health and Wellbeing Across Lifespan A | | PHY 833 Health and Wellbeing Across Lifespan B | | PHY 834 Health and Wellbeing Across Lifespan B | | PHY 835 Professional Development | |
| | | PHY 836 Leadership and Society | | PHY 837 Advanced Leadership and Advocacy | | PHY 838 Business and Law | | PHY 839 Advanced Leadership and Advocacy | |
| | | PHY 840 Leadership and Society | | PHY 841 Leadership and Society | | PHY 842 Leadership and Society | | PHY 843 Leadership and Society | |
| | | PHY 844 Leadership and Society | | PHY 845 Leadership and Society | | PHY 846 Leadership and Society | | PHY 847 Leadership and Society | |
| | | PHY 848 Leadership and Society | | PHY 849 Leadership and Society | | PHY 850 Leadership and Society | | PHY 851 Leadership and Society | |
| | | PHY 852 Leadership and Society | | PHY 853 Leadership and Society | | PHY 854 Leadership and Society | | PHY 855 Leadership and Society | |
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| | | PHY 864 Leadership and Society | | PHY 865 Leadership and Society | | PHY 866 Leadership and Society | | PHY 867 Leadership and Society | |
| | | PHY 868 Leadership and Society | | PHY 869 Leadership and Society | | PHY 870 Leadership and Society | | PHY 871 Leadership and Society | |
| | | PHY 872 Health and Wellbeing Across Lifespan A | | PHY 873 Health and Wellbeing Across Lifespan B | | PHY 874 Health and Wellbeing Across Lifespan B | | PHY 875 Health and Wellbeing Across Lifespan B | |
| | | PHY 876 Business and Law | | PHY 877 Advanced Leadership and Advocacy | | PHY 878 Business and Law | | PHY 879 Advanced Leadership and Advocacy | |
| | | PHY 880 Leadership and Society | | PHY 881 Leadership and Society | | PHY 882 Leadership and Society | | PHY 883 Leadership and Society | |
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| | | PHY 896 Leadership and Society | | PHY 897 Leadership and Society | | PHY 898 Leadership and Society | | PHY 899 Leadership and Society | |
| | | PHY 900 Advanced Leadership and Advocacy | | PHY 901 Dissemination and Researcher Preparation | | PHY 902 Advanced Leadership and Advocacy | | PHY 903 Leadership and Society | |
| | | PHY 904 Advanced Leadership and Advocacy | | PHY 905 Advanced Leadership and Advocacy | | PHY 906 Advanced Leadership and Advocacy | | PHY 907 Advanced Leadership and Advocacy | |

