

PTY301 Neurological Physiotherapy**School:** School of Health - Physiotherapy

2027 | Trimester 1

UniSC Sunshine Coast

**BLENDED
LEARNING**

Most of your course is on campus but you may be able to do some components of this course online.

Please go to unisc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?**1.1. Description**

This course will equip you to assess and treat physiotherapy clients with neurological disorders in a safe, effective, and evidence-based manner in rehabilitation contexts. You will learn about the presentation, pathophysiology, and management of common neurological disorders, and apply motor relearning theory and research findings to guide clinical decision-making. You will also extend skills in analysing and improving posture, movement and gait, and educating and supporting clients with functional re-training and prescribing exercise.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Learning materials – Online resources to prepare for laboratory sessions	3hrs	Week 1	12 times
Laboratory 1 – Lab classes will support students in applying learning to clinical contexts and practical skill development. These will take place within physiotherapy practice laboratories on a biweekly basis.	4hrs	Week 1	12 times
Tutorial/Workshop 1 – Workshops will be scheduled to orientate the full student cohort to the course, enable guest presentations, briefing and support with regards to assessment items.	2hrs	Week 1	6 times

1.3. Course Topics

- Recognise common neurological disorders, understand underlying pathology and clinical presentation, and outline medical management and physiotherapy roles
- Plan and conduct client-centred and evidence based subjective and objective physiotherapy examinations of clients with neurological disorders
- Comply with ethical and legal requirements when assessing and treating clients (e.g. informed consent, clinical documentation, privacy and confidentiality)
- Communicate in a culturally safe, respectful, professional, clear, and effective manner with the clients and other health professionals
- Assess level of consciousness and the cognitive ability of clients to provide informed consent, and to participate in assessment and treatments
- Recognise impairments of communication, cognition, emotion and behaviour and adapt physiotherapy approach as required
- Identify potential dysfunction of the cranial nerves, visual and vestibular systems, cerebellum and basal ganglia
- Assess sensation, proprioception, motor function, strength, reflexes and tone/spasticity in clients with neurological disorders
- Assess and analyse performance of functional tasks and activities by clients with neurological disorders, including rolling, sitting, standing, balance and gait
- Apply clinically reasoning skills to interpret assessment findings, prioritise problems, and generate treatment and reassessment plans
- Set meaningful and realistic treatment goals in collaboration with the client and the health care team
- Conduct safe, effective, and evidence-based treatments and reassessments for clients with neurological disorders
- Apply the motor re-learning approach to treating clients with neurological disorders and prescribe exercise and apply other modalities to assist return to function
- Demonstrate awareness of different neurorehabilitation approaches, and commit to continuing improvement, education and evidence-based practice
- Apply skills in gait rehabilitation and prescription of mobility and gait aids to facilitate client mobility, independence and safe discharge from acute care facilities
- Recognise the roles of different health professionals, work collaboratively as part of the health care team, and refer and handover clients as required

2. What level is this course?

300 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES MAPPING	PROFESSIONAL STANDARD MAPPING *
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...	Physiotherapy Board of Australia
1 Plan and conduct physiotherapy assessment and treatment of clients with neurological disorders in a safe, effective, and evidence-based manner	Knowledgeable Empowered	1.1, 1.2, 1.3, 4.3, 4.4, 4.5, 5.2
2 Apply critical thinking, analytical skills and clinical reasoning to identify client problems and priorities, and to justify and modify assessments and treatments	Creative and critical thinker Empowered	1.1, 1.2, 1.3, 4.3, 4.4, 4.5, 5.1, 5.2
3 Describe common neurological disorders and pathology, and explain the role of physiotherapy and other health professionals in assessment and treatment	Knowledgeable Creative and critical thinker Empowered	1.1, 1.2, 1.3, 1.4, 4.4, 4.5, 5.2
4 Comply with ethical and legal requirements, work safely within scope and capabilities, and seek help when needed in clinical contexts	Empowered Ethical	2.1, 2.2, 3.1, 3.2, 4.2, 4.4, 4.5, 5.2
5 Demonstrate respectful, flexible and effective communication and collaboration with clients and other health professionals and timely and accurate documentation	Empowered Ethical	1.1, 1.2, 3.1, 3.2, 5.1, 5.2, 6.1

* Competencies by Professional Body

CODE	COMPETENCY
PHYSIOTHERAPY BOARD OF AUSTRALIA	
1.1	Plan and implement an efficient, effective, culturally responsive and client-centred physiotherapy assessment
1.2	Involve the client and relevant others in the planning and implementation of safe and effective physiotherapy using evidence-based practice to inform decision-making
1.3	Review the continuation of physiotherapy and facilitate the client's optimal participation in their everyday life
1.4	Advocate for clients and their rights to health care
2.1	Comply with legal, professional, ethical and other relevant standards, codes and guidelines
2.2	Make and act on informed and appropriate decisions about acceptable professional and ethical behaviours
3.1	Use clear, accurate, sensitive and effective communication to support the development of trust and rapport in professional relationships with the client and relevant others
3.2	Record and effectively communicate physiotherapy assessment findings, outcomes and decisions
4.2	Evaluate their learning needs, engage in relevant continuing professional development and recognise when to seek professional support, including peer review
4.3	Efficiently consume and effectively apply research and commit to practice informed by best available research evidence and new knowledge
4.4	Proactively apply principles of quality improvement and risk management to practice
4.5	Recognise situations that are outside their scope of expertise or competence and take appropriate and timely action
5.1	Engage in an inclusive, collaborative, consultative, culturally responsive and client-centred model of practice

5.2 Engage in safe, effective and collaborative interprofessional practice

6.1 Use education to empower themselves and others

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

PTY201 and SPX231 and enrolled in BH001

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

5.5. Microcredential Information

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

Students receive immediate feedback on completion of online quizzes (for MCQ questions) and the first quiz will take place in week 3. Students also receive formative feedback on knowledge and skills in practical laboratory sessions and simulations.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Quiz/zes	Individual	20%	There are 4 online quizzes during the trimester. Each quiz will be limited to 15 minutes duration and will take place in on campus workshops.	Refer to Format	Online Test (Quiz)
All	2	Practical / Laboratory Skills, and Written Piece	Individual	40%	75 minutes (plus 15 minutes reading time)	Week 7	Exam Venue
All	3	Practical / Laboratory Skills, and Written Piece	Individual	40%	75 minutes (plus 15 minutes reading time)	Exam Period	Exam Venue

All - Assessment Task 1: Online Quizzes

GOAL:	To encourage students to engage with learning throughout the trimester and to provide early and regular feedback regarding understanding of course content. Feedback on quiz performance will assist students in revising and preparing for subsequent assessment items which are more heavily weighted.		
PRODUCT:	Quiz/zes		
AUTHORSHIP STATEMENT:			
FORMAT:	There are 4 online quizzes on Canvas. Each quiz will contribute 5% toward the course grade. A quiz is due in week 3, 6, 10, 12. Quizzes will include multiple choice questions and short answer questions related to case studies, including neuroanatomy and pathophysiology and implications for assessment, diagnosis, and treatment.		
CRITERIA:	No.		Learning Outcome assessed
	1	Plan and conduct physiotherapy assessment and treatment of clients with neurological disorders in a safe, effective, and evidence-based manner	1
	2	Apply critical thinking, analytical skills and clinical reasoning to identify client problems and priorities, and to justify and modify assessments and treatments	2
	3	Describe common neurological disorders and pathology, and explain the role of physiotherapy and other health professionals in assessment and treatment	3
GENERIC SKILLS:	Communication, Problem solving, Organisation, Applying technologies, Information literacy		

All - Assessment Task 2: Objective Structured Clinical Examination 1 - Neurological Assessment

GOAL:	To assess student knowledge, skills and clinical reasoning associated with conducting neurological physiotherapy assessments. To ascertain readiness to progress to clinical placement to safely and effectively assess clients with neurological disorders.																			
PRODUCT:	Practical / Laboratory Skills, and Written Piece																			
AUTHORSHIP STATEMENT:																				
FORMAT:	OSCE format with 5 stations: 1. Reading Station (15 min) 2. Assessing Neurological Function (15 min) 3. Case Study 1 (15 min) 4. Case Study 2 (15 min) 5. Written Examination (30 min) The focus of this assessment will be on neuroanatomy, pathophysiology, neurological physiotherapy assessment and clinical reasoning. It will be scheduled in week 7 around other classes. More details will be provided on CANVAS, including the marking schema. Please note: * Students must achieve 50% in this assessment to pass the course and progress to clinical placement. * Students will need to wear their clinical uniform to their exam and also act as simulated clients for their peers' exam. * Students need to be prepared to potentially disrobe to single/ shorts or suitable underwear when acting as a client for their peer.																			
CRITERIA:	<table> <thead> <tr> <th>No.</th><th></th><th>Learning Outcome assessed</th></tr> </thead> <tbody> <tr> <td>1</td><td>Plan and conduct physiotherapy assessment and treatment of clients with neurological disorders in a safe, effective, and evidence-based manner</td><td>1</td></tr> <tr> <td>2</td><td>Apply critical thinking, analytical skills and clinical reasoning to identify client problems and priorities, and to justify and modify assessments and treatments</td><td>2</td></tr> <tr> <td>3</td><td>Describe common neurological disorders and pathology, and explain the role of physiotherapy and other health professionals in assessment and treatment</td><td>3</td></tr> <tr> <td>4</td><td>Comply with ethical and legal requirements, work safely within scope and capabilities, and seek help when needed in clinical contexts</td><td>4</td></tr> <tr> <td>5</td><td>Demonstrate respectful, flexible and effective communication and collaboration with clients and other health professionals and timely and accurate documentation</td><td>5</td></tr> </tbody> </table>	No.		Learning Outcome assessed	1	Plan and conduct physiotherapy assessment and treatment of clients with neurological disorders in a safe, effective, and evidence-based manner	1	2	Apply critical thinking, analytical skills and clinical reasoning to identify client problems and priorities, and to justify and modify assessments and treatments	2	3	Describe common neurological disorders and pathology, and explain the role of physiotherapy and other health professionals in assessment and treatment	3	4	Comply with ethical and legal requirements, work safely within scope and capabilities, and seek help when needed in clinical contexts	4	5	Demonstrate respectful, flexible and effective communication and collaboration with clients and other health professionals and timely and accurate documentation	5	
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2	Apply critical thinking, analytical skills and clinical reasoning to identify client problems and priorities, and to justify and modify assessments and treatments	2																		
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5	Demonstrate respectful, flexible and effective communication and collaboration with clients and other health professionals and timely and accurate documentation	5																		
GENERIC SKILLS:	Communication, Problem solving, Organisation, Information literacy																			

All - Assessment Task 3: Objective Structured Clinical Examination 2 - Neurological Treatment

GOAL:	To assess student knowledge, skills and clinical reasoning relating to neurological physiotherapy treatment. Students will also need to demonstrate competency in applying the motor re-learning program principles to treat clients with neurological disorders in a safe and effective manner.		
	To ascertain readiness to progress to clinical placement to safely and effectively treatment clients with neurological disorders.		
PRODUCT:	Practical / Laboratory Skills, and Written Piece		
AUTHORSHIP STATEMENT:			
FORMAT:	OSCE format with 5 stations focused on neurological physiotherapy treatment and reassessment: 1. Reading Station (15 min) 2. Upper Limb and Oromotor Function (15 min) 3. Sitting and Standing Balance Treatment (15 min) 4. Transfers and Mobilisation (15 min) 5. Written Examination (30 min) The focus of this assessment will be on applying motor relearning program principles to safely and effectively treating clients with variable functional issues related to upper limb, oromotor function; sitting and standing balance; transfers and mobilisation. This assessment will be scheduled in the Examination period around other assessments. More details will be provided on CANVAS, including the marking schema. Please note: * Students must achieve 50% in this assessment to pass the course and progress to clinical placement. * Students will need to wear their clinical uniform to their exam and also act as simulated clients for their peers' exam. * Students need to be prepared to potentially disrobe to single/ shorts or suitable underwear when acting as a client for their peer.		
CRITERIA:	No.		Learning Outcome assessed
	1	Plan and conduct physiotherapy assessment and treatment of clients with neurological disorders in a safe, effective, and evidence-based manner	1
	2	Apply critical thinking, analytical skills and clinical reasoning to identify client problems and priorities, and to justify and modify assessments and treatments	2
	3	Describe common neurological disorders and pathology, and explain the role of physiotherapy and other health professionals in assessment and treatment	3
	4	Comply with ethical and legal requirements, work safely within scope and capabilities, and seek help when needed in clinical contexts	4
	5	Demonstrate respectful, flexible and effective communication and collaboration with clients and other health professionals and timely and accurate documentation	5
GENERIC SKILLS:	Communication, Problem solving, Organisation, Information literacy		

6.4. Assessment to competency mapping

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
PHYSIOTHERAPY PRACTICE THRESHOLDS IN AUSTRALIA AND AOTEAROA NEW ZEALAND				
All delivery modes	Practical / Laboratory Skills, and Written Piece	Objective Structured Clinical Examination 1 - Neurological Assessment	1.1	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			1.2	Taught, Practiced, Assessed
			1.3	Taught, Practiced, Assessed
			1.4	Taught, Practiced, Assessed
			2.1	Practiced, Assessed
			2.2	Practiced, Assessed
			3.1	Taught, Practiced, Assessed
			3.2	Taught, Practiced, Assessed
			4.3	Taught, Practiced, Assessed
			4.4	Taught, Practiced, Assessed
			4.5	Taught, Practiced, Assessed
			5.1	Taught, Practiced, Assessed
			5.2	Taught, Practiced, Assessed
			6.1	Taught, Practiced, Assessed
			7.1	Practiced, Assessed
		Objective Structured Clinical Examination 2 - Neurological Treatment	1.1	Taught, Practiced, Assessed
			1.2	Taught, Practiced, Assessed
			1.3	Taught, Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			1.4	Taught, Practiced, Assessed
			2.1	Practiced, Assessed
			2.2	Practiced, Assessed
			3.1	Taught, Practiced, Assessed
			3.2	Taught, Practiced, Assessed
			4.3	Taught, Practiced, Assessed
			4.4	Taught, Practiced, Assessed
			4.5	Taught, Practiced, Assessed
			5.1	Taught, Practiced, Assessed
			5.2	Taught, Practiced, Assessed
			6.1	Taught, Practiced, Assessed
			7.1	Practiced, Assessed
	Quiz/zes	Online Quizzes	1.1	Taught, Practiced, Assessed
			1.2	Taught, Practiced, Assessed
			1.3	Taught, Practiced, Assessed
			1.4	Taught, Practiced, Assessed
			2.1	Practiced, Assessed
			2.2	Practiced, Assessed

PROGRAMME DELIVERY MODE	ASSESSMENT TYPE	TITLE	COMPETENCY	TEACHING METHODS
			3.1	Taught, Practiced
			3.2	Taught, Practiced
			4.3	Taught, Practiced, Assessed
			4.4	Taught, Practiced, Assessed
			4.5	Taught, Practiced, Assessed
			5.1	Taught, Practiced, Assessed
			5.2	Taught, Practiced, Assessed
			6.1	Practiced, Assessed

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
Module 1: Neurological Physiotherapy Assessment	Workshops, Online Learning and Laboratory Sessions
Module 2: Neurological Physiotherapy Treatment	Workshops, Online Learning and Laboratory Sessions

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

You need regular access to the resource(s) below. Many texts are available as ebooks through the [Library](#) at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Required	Janet H. Carr, Roberta B. Shepherd	2010	Neurological Rehabilitation	n/a	Elsevier India
Recommended	Janet H. Carr, Roberta B. Shepherd	2003	Stroke Rehabilitation	n/a	Butterworth-Heinemann Medical
Recommended	Anne Shumway-Cook, Marjorie H. Woollacott, Jaya Rachwani, Victor Santamaria	0	Motor Control	n/a	n/a

8.2. Specific requirements

Standard PTY course requirements for practical classes (e.g. comply with OH&S, manual handling, infection control; be prepared for disrobing and hands on practice with peers; clinical uniform for practical assessments; inform tutor of any pain or injuries or illnesses affecting participation). Classes at Sunshine Coast Health Institute also require students to be vaccinated against COVID 19 and be inducted to the site.

Students must achieve at least 50% in practical OSCEs to pass the course and progress to clinical placement. This is a program and accreditation requirement to ensure client safety. Students who fail their first attempt will be provide with feedback and opportunity to re-sit the examination. A maximum score of 50% will be achieved in re-sit examinations. Feedback will be provided from the first attempt to inform preparation and revision for the second attempt.

9. How are risks managed in this course?

Risk assessments have been performed for all field activities and low to moderate levels of health and safety risk exists. Moderate risks may include working in an Australian bush setting, working with people, working outside normal office hours for example. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

Please note: Students will have one re-sit examination opportunity for Assessment Items 2 (OSCE 1 Neurological Assessment) and 3 (OSCE 2 Neurological Treatment). The re-sit opportunity will be offered if students fail their first attempt given the potentially stressful nature of an OSCE, and need for students to pass these assessment items to progress to future clinical placements. If a student passes their re-sit examination the maximum score they will receive for this assessment item will be 50%.

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

Less than 15 minutes: No penalty
From 15 minutes to 30 minutes: 20% penalty
More than 30 minutes: 100% penalty

10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.6. General Enquiries

For course-specific questions, contact your teaching staff or Course Coordinator.

For other enquiries or to access support, please contact Student Central:

- [UniSC Student Central](#)
- [UniSC Adelaide Student Central](#)