UBC MPT student academic/clinical training per placement

Or, What to expect from a UBC MPT student on placement

Students must complete a total of six five-week clinical placements as part of their MPT program. There are three levels of placements. Below is a listing of their curriculum and placement timing.

NOTE:

• Below are sample dates, from the 2017-19 graduating cohort. Exact dates change slightly with each cohort. Placement dates for current cohorts can be found on our <u>Clinical Education webpage</u>.

Placement	Skill level	Coursework	What to expect
Level 1 1A April 23- May 25	Beginner	 Prior to starting 1A: Students have been in classes since September, focusing on basic sciences (e.g., Anatomy, Neuroanatomy) and foundational clinical practice skills in an integrated curriculum, including an understanding of musculoskeletal, cardioresp, movement analysis and exercise prescription. Knowledge of MSK at this level includes joint scans and exercise prescription (ROM, resisted and flexibility exercises), basic sports physiotherapy and gait re-education with various gait aids. Students have very limited exposure to the theoretical basis for the assessment of neurological conditions and no exposure to the treatment of neurological conditions. Students have been on a shadow placement (four mornings) but have not had any other clinical experience to date. 	Students are at a beginner level and will have limited clinical exposure but should be self-directed learners who problemsolve, identify their learning needs, and actively seek out learning opportunities. Students are expected to exhibit professional behaviour and communication at all times. Students should be capable of working independently with some clients with "simple" (non-complex) conditions by the end of the placement.
1B May 28 - June 29	Beginner	This placement is back-to-back with 1A. Students will have covered coursework as above.	As with 1B, plus the ability to bring skills and learning from their 1A placement into a new clinical setting and adapt learned skills to a new environment. Caseload should be a maximum of 50% of a full caseload by the end of the placement (may be considerably less in more complex settings).
Level 2 2A November 5- December 7	Intermediate	 Prior to starting 2A: Students have returned to classes for an academic block after Level 1 placements. Students have completed 10 weeks of clinical experience in two different clinical areas (1A + 1B: five weeks in each area). Students have completed academic content that encompasses adult and pediatric neuro, electrophysical agents, and musculoskeletal. Students have a strong focus on neurology and electrotherapy. 	Students are now intermediate level learners. They should be able to build on their previous clinical experience by adapting their previous learning and skills to different environments and somewhat more complex clients and challenges. Students should be independent with less complex clients but may require assistance with complex clients in Level 2.

2A (continued)		 MSK content at this level includes basic peripheral joint mobilization, as well as assessment and treatment related to common outpatient PT MSK conditions. Neurological practical content includes entry-level skills related to the assessment and treatment of common adult/pediatric neurological conditions. Students will not have completed any manual therapy courses. 	
Level 2 2B February 12- March 15	Intermediate	Students return to classes after 2A, and complete an academic block that includes advanced manual therapy assessment and treatment of the spine and periphery, as well as more advanced sports physiotherapy. Students will have covered coursework as above. This placement is followed directly by 3A.	As with 2A, plus the ability to bring skills and learning from their 2A placement into a new clinical setting and adapt learned skills to a new environment. Caseload should be a maximum of 75% of a full caseload by the end of Level 2 placements (may be less in more complex settings or caseload).
Level 3 3A March 18 - April 19	Advanced Intermediate	Students have completed academic coursework as per level 2B.	Students in 3A should have a solid theoretical grounding in academic content coupled with clinical learning from four different clinical settings (total of 20 weeks). Students should be relatively independent throughout the placement, after some initial orientation to the specifics of the clinical setting and the scope/role of the physiotherapist in that setting. Students will require guidance for more complex or unfamiliar cases.
Level 3 3B August 19 - September 20	Nearing entry-level	Prior to starting 3B: Students have completed all class work including advanced cardiorespiratory, management of patients with limb loss, courses and academic program requirements with the exception of this final clinical placement.	By the end of 3B placements students should be performing at entry level and are able to independently manage a caseload appropriate for a new grad. Students should take responsibility for their own learning, actively seeking out information and asking questions to guide their own professional development. The Clinical Educator role should transition to more of a mentorship role by the end of the placement.

UBC MPT student selected assessment and treatment skills: Levels 1, 2, and 3

The following list includes assessment and treatment skills which the UBC MPT student may have had the opportunity to learn and practice in the **academic** setting (either in theory or in practical lab sessions with fellow students) prior to the current placement.

It is a general guide only, and will have been augmented by the unique clinical education practical experiences of each student. Competence in these skills should NOT be assumed and performance should be assessed by the site.

This information is intended to assist the supervising therapist in planning the clinical experience and in evaluating the students' performance in the Role of Expert 1.0 and enabling competencies 1.3 - 1.8 areas of the Assessment of Clinical Performance (ACP).

NOTE RE: LEVEL 1 STUDENTS

- Level 1 students have very limited (if any) clinical education practical experience and generally their skills will be at a beginner level.
- Level 1A and 1B placements are back-to-back, therefore students' theory and practical skills listed below are as of their 1A placement.

LEVEL 1:	LEVEL 1: ASSESSMENT PROCEDURES			
Theory	Practical	GENERAL AND MUSCULOSKELETAL		
1	1	Interview patient to obtain relevant subjective data		
1	1	Identify pertinent information from patient record		
1	1	Develop and utilize observation skills		
1	1	Develop and utilize palpation skills		
1	1	Determine pulses		
1	1	Measure blood pressure		
1	1	Perform joint scans, including upper and lower quadrant scans, as well as peripheral joint scans		
1	1	Assess joint range in relation to endfeel, spasm and pain		
1	1	Measure joint range of movement with goniometer		
1	1	Measure limb girth, and leg length and muscular flexibility		
1	1	Test ligamentous stability of peripheral joints		
1	1	Utilize special tests for assessing localized pathologies		
1	1	Assess gait (walking and running)		
1	1	Assess posture		
1	2	Assess need for and/or monitors casts/splints		
1	No	Assess indications for orthotic devices		
1	1	Grade muscle strength		
1	1	Test tendon reflexes		
1	1	Test sensory function		
1	1	Assess ADL		
1	1	Assess need for standard ambulation aids		

Theory	Practical	RESPIROLOGY
1	1	Understand arterial blood gases, how performed and their interpretation
1	1	Measure respiration rate, blood pressure and heart rate
1	1	Assess respiratory status by inspection
1	1	Assess respiratory status by auscultation: normal and abnormal breath and adventitious sounds
1	1	Assess breathing pattern and work of breathing

Theory	Practical	RESPIROLOGY (continued)
1	1	Assess respiratory function by inspection and palpation
1	1	Assess cough reflex, ability to expectorate
1	1	Assess endurance/exercise tolerance
1	1	Evaluate chest x-rays via a frontal chest x-ray
1	1	Perform and Evaluate the 6MWT
1	1	Assess basic post-operative functional mobility (including basic post-surgical lines)
1	1	Understand low flow and high flow oxygen therapy devices

Theory	Practical	NEUROLOGY (ADULT AND PEDIATRICS)
1	1	Assess sensation and vision

Theory	Practical	CARDIOVASCULAR
1	1	Evaluate stress test results
1	1	Electrocardiogram monitors

LEVEL 1:	LEVEL 1: THERAPEUTIC PROCEDURES AND MODALITIES				
Theory	Practical	GENERAL AND MUSCULOSKELETAL			
1	1	Movement re-education, including transfers and mobility			
1	1	Wheelchair management			
1	1	Ambulation aids			
1	1	Self-care equipment and materials			
1	1	Group activities			
1	No	Adaptation of equipment for therapeutic or recreational purposes			
1	Some	Environmental management			
1	1	Stress management			
1	1	Exercise to develop joint range of movement and muscle extensibility			
1	1	Exercise to develop muscle strength, endurance and power			
1	1	Exercise to improve balance and posture			
1	1	Basic therapeutic and sports taping techniques			
1	1	PNF			
1	1	Massage			

Theory	Practical	RESPIROLOGY
1	1	Wall equipment - flowmeters, humidifiers, masks and tubing
1	1	Oximetry
1	No	Nebulizers
1	1	Mechanical vibrator and percussor
1	1	Incentive inspirometry
1	1	Breathing exercises to aid with ventilation, relaxation and shortness of breath
1	1	Assist coughing (one person), huffing and forced expiratory techniques
1	1	Vibration, shaking, percussion
1	1	Positioning and breathing exercises to improve ventilation
1	1	Positioning and breathing exercises to improve perfusion
1	1	Inspiratory muscle training via IMT devices
1	1	Resisted exercise to increase inspiratory muscle endurance
1	1	Positions to improve ventilation-perfusion ratio
1	1	Position for postural drainage
1	1	Graded exercise program specific for pulmonary rehabilitation

Theory	Practical	RESPIROLOGY (continued)
1	1	Flutter device PEP and vibrating PEP devices
1	1	Active cycle breathing technique
1	1	Mobilization to enhance cardiopulmonary function

LEVEL 2 A/B: ASSESSMENT PROCEDURES

Theory	Practical	GENERAL AND MUSCULOSKELETAL
2A	2A	Assess accessory joint movement of spinal and peripheral joints
2A	2A	Assess passive stability of spinal joints

Theory	Practical	RESPIROLOGY
2A	2A	Assess cardiovascular status
2A	2A	Assess arterial status
2A	2A	Assess venous status
2A	No	Assess lymphatic status

Theory	Practical	NEUROLOGY (ADULT AND PEDIATRICS)
2A	2A	Assess level of consciousness
2A	2A	Assess functional communication skills
2A	2A	Assess level of cognitive function
2A	2A	Assess cranial nerve function
2A	2A	Assess muscle tone
2A	2A	Test fine, gross, and perceptual motor skills and coordination
2A	2A	Assess need for and/or monitors casts/splints
2A	2A	Assess balance and functional mobility (rolling, sit to stand to sit, wheelchair, etc.)
2A	2A	Assess neurodevelopmental status (pediatrics only)
2A	2A	Utilize a problem-solving approach to differentially assess contributors to movement
		dysfunction
2A	2A	Select and use appropriate objective measures for each system assessed

LEVEL 2A / 2B: THERAPEUTIC PROCEDURES AND MODALITIES

Theory	Practical	GENERAL AND MUSCULOSKELETAL
2A	2A	Patient/family/caregiver education
2B	2B	Perform selected manual mobilization techniques for the spinal and peripheral joints
2B	2B	Manipulation of the ankle joint
2B	No	Use of mechanical traction
2B	No	Splint/Cast use
2B	No	Orthotic use
2B	2B	Advanced therapeutic exercise)
2B	2B	Advanced sports therapy including use of external support (i.e., bandaging, taping techniques)
2B	2B	Selected deep transverse friction massage frictions
2B	2B	Apply knowledge of movement sciences and functional movement biomechanics to adapted
		sport participation
2A	2A	Gait training
2B	2B	Neural mobilization techniques
No	No	Jobst pneumatic compression unit
2B	2B	Consolidation of knowledge to complete cervical, thoracic or lumbar scans both
		comprehensively and in a timely manner

Theory	Practical	GENERAL AND MUSCULOSKELETAL (continued)
2A	2B	Evaluate stiff or hypermobile pelvis
2B	2B	Assessment of neural mobility

Theory	Practical	RESPIROLOGY
2A	2A	Suction
2A	No	Graded exercise program specific for cardiac rehabilitation

Theory	Practical	ELECTROTHERAPY
2A	No	Non-current electrical modalities (SWD)
2A	No	Non-current electrical modalities (UVL)
2A	2A	Non-current electrical modalities (HVPC)
2A	2A	Ultrasound
2A	2A	Hot packs
2A	2A	Wax
2A	2A	Interferential current
2A	2A	Neuromuscular electrical stimulation (NMES)
2A	2A	T.E.N.S.
2A	2A	Laser
2A	2A	Cryotherapy
2A	2A	Biofeedback - E.M.G.
2A	No	Hydrotherapy

LEVEL 3A/3B: ASSESSMENT PROCEDURES

Theory	Practical	GENERAL AND MUSCULOSKELETAL
3B	3B	Assessment and treatment of patient with limb loss

Theory	Practical	RESPIROLOGY
3B	No	Evaluate fluid balance
3B	3B	Acute cardiovascular assessment (heart sounds, jugular vein distention, blood pressure, heart
36	36	rate, edema)
3B	No	Evaluate mechanical ventilators and the effects on patients respiratory status
3B	3B	Evaluate chest x-rays via a lateral radiograph
3B	No	Evaluate patients in the pediatric and neonatal intensive care units
3B	No	Understands monitoring devices/lines for the critically ill patient

Theory	Practical	CARDIOVASCULAR
3B	No	Intracranial pressure monitor

Theory	Practical	OTHER
3B	No	Evaluates burn patients

LEVEL 3: THERAPEUTIC PROCEDURES AND MODALITIES

Theory	Practical	GENERAL AND MUSCULOSKELETAL
3B	Some	Prosthetic training
3B	3B	Assess indications for and fit of prosthetic device
3B	3B	Exercise prescription and positioning for patients post-limb loss
		Utilizes positioning to prevent or reduce deformities

Theory	Practical	GENERAL AND MUSCULOSKELETAL (continued)
3B	3B	Treatment concepts for patients with chronic pain conditions
3B	3B	Basics of assessment and treatment of patients with hand injuries

Theory	Practical	RESPIROLOGY
3B	No	Understands how to treat patients who are using mechanical ventilation
3B	3B	Assisted cough, percussions and vibrations for mechanically ventilated patients
3B	3B	Assisted cough via two-person method
3B	3B	Manual hyperinflation
3B	3B	Proning a mechanically ventilated patient

Theory	Practical	NEUROLOGY
3B	3B	Apply recovery of function theory to treatment goals and movement re-education
3B	3B	Apply motor learning principles to movement re-education
3B	3B	Apply knowledge of movement sciences and functional movement biomechanics to movement
		re-education
3B	3B	Modify treatment for various levels of cognitive functioning
3B	3B	Gaze and postural stability exercises
3B	3B	Set objective, measurable short-term treatment goals

Theory	Practical	OTHER
3B	No	Establishes therapeutic program for burn patients