

PHTH 560 INTEGRATED ORTHOPEDIC MANAGEMENT

Credits: 6

Prerequisites: Successful completion of PHTH-550

Instructor:

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Various clinicians during in-person labs

Course Description: This course is the second in a series of three where *simple musculoskeletal conditions* will be addressed in order to provide students with a basic level of Physical Therapy skills in patient evaluation and treatment.

Course Structure: The course is made up of a combination of lectures, directed labs and clinical reasoning workshops (CRW) for twelve (12) hours a week over 13 weeks.

Weekly:

Lecture: Monday 11h35 to 14h25 (3h):

Lab: Tuesday 8h35 to 11h30 & Wednesday 12h35 to 15h30 (2 x 3h)

CRW: Tuesday 11h45-12h55 & Wednesday 15h45 to 16h55 (2 x 1h15)

Open labs will be scheduled based on the availability of instructors and facilities as per students' request.

Instructional Method: The course focuses mainly on the assessment and treatment of *simple orthopedic conditions*. The lectures will consist of a review of the relevant anatomy and biomechanics related to each orthopedic condition that will be covered in the course as well as presentation of common orthopedic conditions, their associated clinical presentation and treatment options.

The labs will consist on peripheral and spinal scan, evidenced based assessment techniques and treatment techniques for orthopedic conditions.

The CRWs will focus on a case-based, client-centered approach following the H-SOAPIER format. The course emphasizes a gradual increase in student responsibility for the course matter.

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Course Content

Professional and ethical as well as functional and psychosocial issues will be considered when assessing and treating patients in different age groups with different conditions/injuries.

The structure of the course is divided into four (4) modules as follows:

- 1. Module 1: The lower extremity (Ankle joint, hip joint & knee joint) (3 weeks)
- 2. Module 2 : The spine (Lx spine, SI joint, Tx spine & Cx spine) (4 weeks)
- 3. Module 3: The upper extremity (Shoulder joint, elbow joint & wrist joint) (3 weeks)
- 4. Module 4: Electrotherapy (1 week)

Learning Outcomes

General Learning outcomes: This course will cover essential competencies and milestones related to the domains of physiotherapy expertise, communication, collaboration, management, scholarship and professionalism. Upon completion of this course and building on previously learned orthopaedic knowledge, the student will be able to evaluate and treat clients with *simple conditions* (medical diagnosis) affecting the musculoskeletal system, using an evidence-informed approach.

Specific Learning Outcomes				
Lear	Milestones			
1. i	Demonstrate evidence of theoretical knowledge and practical skills in the following areas relevant to musculoskeletal rehabilitation:			
a	 Theory and foundation of Manual Therapy 1. Historical perspective 2. Evidence-informed application to the practice of physiotherapy Role of joint and soft-tissue mobilisation Principles of joint mobilisation Osteokinematics and arthrokinematics Passive accessory glides End feel - normal vs. abnormal 	6.1.1		
b. 3	Simple musculoskeletal pathologies	6.1.1		
c.	 Basic components of a physiotherapy scan/assessment 1. Neurological exam 2. Scan of the spine (regional) 3. Assessment of the extremities 4. Introduction to manual therapy 	1.3.7, 1.4.1, 6.1.1		
d. :	Stability tests and special tests related to simple musculoskeletal pathologies 1. Application	1.3.7, 1.4.1, 6.1.1		

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Lea	arning objectives	Milestones	
	2. Interpretation		
	3. Psychometric properties		
	4. Individual vs. multiple tests		
e.	Biophysical Agents	1.5.3, 6.1.1	
	1. Interferential Currents		
2.	Relate the theoretical knowledge and practical skills described above		
	in order to perform a basic physiotherapy assessment of clients with		
	simple musculoskeletal conditions affecting the extremities and		
	spine.		
а.	Demonstrate verbal and written communication skills in order to	1.1.1 to 1.1.6,	
	1. Interact with clients, care-givers and other health care	1.3.1 to 1.3.6,	
	professionals in a manner which promotes:	2.1.1 to 2.1.4,	
	1. the clients' and/or care-givers' dignity and autonomy	2.2.1 to 2.2.3,	
	2. respectful, ethical and professional relationships	2.3.1 to $2.3.3$,	
	2. Conduct a client interview, including	2.3.5, 7.4.1.,	
	1. relevant past medical history	7.4.2, 7.4.5	
	2. relevant subjective information		
	3. personal, medical, environmental, psychosocial and		
	2 Write a client assessment and intervention using the H		
	5. White a client assessment and intervention using the n-		
	A Document the findings of standardized outcome measures		
	4. Document the infulings of standardized outcome measures		
h	Collect relevant objective findings	137	
р. С	Select and apply manual therapy techniques and special tests	1.3.7	
с.	appropriate to adult nation?'s condition		
d.	Ensure a safe environment for client and therapist at all times	1.2.1 to 1.2.3.	
	1. Identify contraindications to orthopedic conditions	1.4.6	
	2. Recognize "red flags" which indicate the presence of serious		
	pathology (and need for physician referral)		
3.	Start to apply clinical reasoning skills in order to establish a		
	physiotherapy diagnosis		
a.	Collect subjective and objective findings in order to	1.4.1, 1.4.3,	
	1. Name the structures that could be at fault	1.4.4, 6.1.1,	
	2. Identify the severity, irritability and nature of the condition	6.1.3	
	3 Recognize the significant clues related to the nationt's		
	sondition		
	condition		

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Learning objectives		Milestones
	Interpret manual therapy techniques and special tests	
	5. Elaborate simple working hypotheses	
4.	Develop and apply an evidence-informed intervention plan related	
	to the physiotherapy diagnosis for clients with simple	
	musculoskeletal conditions affecting the extremities and spine.	
a.	Make use of treatment protocols and clinical practice guidelines	1.5.2, 1.5.3,
		6.1.1 to 6.1.5
b.	Make use of technologies and evidence-informed online resources	2.4.2, 2.4.3,
		6.1.1 to 6.1.5
с.	Write a problem list based on the WHO International Classification of	1.4.2,
	Functioning, Disability and Health Model	3.1.1
d.	Determine short and long-term client-centered goals	1.1.1, 1.1.3,
_		1.5.1, 3.1.2
e.	Identify appropriate outcome measures that will be used to reassess	1.5.6
_	client status and needs	
f.	Develop and apply treatment plan to address the problem list and	1.5.2 to 1.5.5,
	goals which consists of education, modalities, manual therapy,	7.2.1
	exercise prescription, gait training, postural retraining and functional	
	or work related retraining	
g.	Predict a realistic prognosis, anticipate frequency of visits and	1.4.4, 1.6.2
	discharge planning	
h.	Educate client regarding his/her condition and its management	1.5.4
	1. Promote active self-management	
i.	Monitor client status by evaluating the effectiveness of the	1.5.5 to 1.5.7
	interventions and adapt/modify the interventions, treatment plan and	
	goals based on the client's response and progress	
i.	Recognize the need for referral to other services/health care	1.4.6, 3.1.1,
1	professionals if required including	3.2.1
	1. MD if client came from direct access	
	2. OT for return to work or ergonomics	
	3 Psychologist as needed	
	4 Other health care professionals as needed	
k	Determine when client discharge is appropriate and develop a	157167
к.	discharge or transition of care plan	1.J.2, 1.U.2
k.	Determine when client discharge is appropriate and develop a discharge or transition of care plan	1.5.2, 1.6.2

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Course Materials

Required texts:

- 1. Whitmore, S., Gladney, K. & Driver, A. (2008). The upper Quadrant: A workbook of Manual Therapy Techniques, 2nd Edition. Whitmore Physiotherapy Consulting Inc. Canada.
- 2. Whitmore, S., Gladney, K. & Driver, A. (2008). The lower Quadrant: A workbook of Manual Therapy Techniques, 2nd Edition. Whitmore Physiotherapy Consulting Inc. Canada.

Reference texts:

- 1. Dutton (2017). Orthopaedic Examination, evaluation & intervention. 2nd ed. McGraw-Hill
- 2. Magee DJ (2014). Orthopedic physical assessment, 6th ed. Elsevier. St. Louis, MO. Available online at the McGill Library.
- 3. Olson Kenneth A. (2016). Manual physical therapy of the spine. 2nd ed. Elsevier. Available online at the McGill Library.

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Assignment/Evaluation	Value	Due Date	Milestones Assessed
One spot check	3%	Refer to course schedule	1.2.1 to 1.2.4, 1.3.1, 1.3.7, 1.4.1, 1.4.3, 1.4.4, 1.5.2, 1.5.3, 1.5.5, 1.5.7, 2.1.1 to 2.1.4, 2.3.1 to 2.3.3, 4.2.3, 4.3.4, 6.1.1 to 6.1.4, 7.4.5
Participation: Assignments	2%	Refer to course schedule	1.3.4, 1.3.5, 1.3.6, 1.4.1 to 1.4.6, 1.5.1, 1.5.2, 1.6.2, 2.2.3, 2.4.3, 6.1.1, 6.1.2
Written exams: Module 1 Module 2 Module 1, 2, 3 & 4	15% 20% 30%	Refer to course schedule	1.2.1, 1.3.5, 1.3.7, 1.4.1 to 1.4.4, 1.5.2, 1.5.7, 2.2.1, 2.2.3, 6.1.1, 6.1.2, 6.1.4 1.1.1, 1.2.1, 1.4.1 to 1.4.4, 1.5.2, 2.2.1, 2.2.3, 6.1.1, 6.1.2
Objective Structured Clinical Examination (OSCE): OSCE Lower Quadrant OSCE Upper Quadrant	15% 15%	Refer to course schedule	1.1.1, 1.1.4, 1.1.5, 1.1.6, 1.2.1 to 1.2.4, 1.3.5, 1.3.7, 1.4.1, 1.4.3, 1.4.4, 1.4.5, 1.5.2 to 1.5.5, 1.5.7, 2.1.1 to 2.1.4, 2.3.1 to 2.3.5, 4.2.3, 4.2.4, 4.3.4, 6.1.1 to 6.1.4, 7.4.5, 7.4.6

Assignments and Evaluation

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*In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

Special Requirements for Course Completion and Program Continuation: For U3 students, in order to pass the course, a grade of at least C+ (60%) must be obtained as a total course mark. For QY students, in order to pass the course, a grade of at least B- (65%) must be obtained as a total course mark. Please refer to the appropriate sections in both undergraduate and graduate calendars on University regulations regarding final and supplemental examinations.

This course falls under the regulations concerning theoretical and practical evaluation as well as individual and group evaluation. Please refer to the section on marks in the Rules and Regulations for Student Evaluation and Promotion of the Physical Therapy Course Guides.

Plagiarism/Academic Integrity: [Amended by Senate on January 16, 2019]: McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the <u>Code of Student</u> <u>Conduct and Disciplinary Procedures</u>.

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le <u>Code de conduit de l'étudiant et des procédures disciplinaires</u>.

Right to submit in English or French written work that is to be graded: In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

Consequences of not completing assignments as requested: An individual who does not complete a required assignment and does not have a university recognized reason for deferral would receive a 0 in that portion of the evaluation.

Disability: If you have a disability, please contact the instructor to arrange a time to discuss your situation. It would be helpful if you contact the Office for Students with Disabilities at 514-398-6009 before you do this. <u>http://www.mcgill.ca/spot/files/spot/osd</u> process and flowchart for students 2015.pdf page 3

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Attendance: Students are expected to attend all lectures and are required to attend all clinical reasoning workshops and labs. Students who have missed more than 15% of laboratory or small group sessions, or who miss any required professional workshop or seminar, without prior approval, will receive 0/10 for participation in the course. If a course does not have a participation mark, then the final course mark will be deducted by a 10% mark. This rule applies to labs and to all required workshops, seminars or professional activities.

Dress Code: Students are expected to demonstrate professional behaviour and wear appropriate attire at all times, in accordance with clinical sites specific regulations. It is each student's responsibility to have appropriate attire during all class assignments and learning activities. When working with clients or simulated patients, student must be dressed professionally.

Professional Conduct: Professionalism and accountability are expected throughout the course of the semester. This includes the on-going respectful nature of teacher-student as well as student-student interactions.

Technology in Class: Your respectful attentive presence is expected, therefore while you are permitted to use your laptop in class, it is understood that you will not be using your laptop or cell-phone for social purposes during class time (e.g. email, msn, sms). Your cell phone should be on silence during class time and phone calls should only take place during the break or after class.

Course evaluations: <u>End-of-course evaluations</u> are one of the ways that McGill works towards maintaining and improving the quality of courses and the students' learning experience. You will be notified by e-mail when the evaluations are available.

Additional policies governing academic issues which affect students can be found in the <u>Academic Rights and Responsibilities</u>

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