### PHTH 560 INTEGRATED ORTHOPEDIC MANAGEMENT

Credits:	6
Prerequisites:	Successful completion of PHTH 550
Instructor:	Isabel Audette, Pht, FCAMPT, MSc (Faculty lecturer & Coordinator) Frangiska Xenopoulos Pht, MCISc FCAMPT (Faculty lecturer) Chantal Ball Pht, MCISc FCAMPT (Sessional) Crystal Garnett Pht (Faculty Lecturer) Jasmine Pollice, Pht (Sessional) Sabrina Ianni Pht, MCISc FCAMPT (Sessional)

#### Access to the Instructor:

Isabel Audette: isabel.audette@mcgill.ca 514 237-2107 (please use email first)

### **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.

The course will focus on a case-based, client-centered approach following the SOAPIE format.

#### **Course Structure:**

<u>Weekly:</u>	
Lecture:	Monday 2h35 to 5h25 (3h)
Lab class:	Tuesday & Wednesday 8h00 to 11h (2 x 3h)
CRW:	Tuesday & Wednesday 11h15 to 12h30 (2 x 1h15)

## Learning Outcomes

### General Learning outcomes:

Building on previously learned orthopaedic knowledge, the student will be able to assess and treat clients of different ages with simple conditions affecting the musculoskeletal system

## Specific learning outcomes:

Reference to key physiotherapy competencies<sup>1</sup>: Expert (E) , Communicator (Com), Collaborator (Col), Manager (M), Advocate (A), Scholarly Practitioner (S), Professionalism (P)

On completion of this course the student will be able to:

- 1. Demonstrate evidence of theoretical knowledge and practical skills in the following areas relevant to musculoskeletal rehabilitation:
  - a. Theory and foundation of Manual Therapy (E)
    - i. Historical perspective
    - ii. Evidence-informed application to the practice of physiotherapy
      - 1. Role of joint and soft-tissue mobilisation
      - 2. Principles of joint mobilisation
        - a. Osteokinematics and arthrokinematics
        - b. Passive accessory glides
        - c. End feel normal vs. abnormal
  - b. Simple musculoskeletal pathologies (E)
  - c. Basic components of a physiotherapy scan/assessment (E)
    - i. Neurological exam
    - ii. Scan of the spine (regional)
    - iii. Assessment of the extremities
    - iv. Introduction to manual therapy
  - d. Special tests related to simple musculoskeletal pathologies (E)
    - i. Application
    - ii. Interpretation
      - 1. psychometric properties
      - 2. individual vs. multiple tests
- 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.
  - a. Demonstrate basic verbal and written communication skills in order to:
    - i. Interact with clients, care-givers and other health care
      - professionals in a manner which promotes: (Com, Col, P)
        - 1. The clients' and/or care-givers' dignity and autonomy
        - 2. Respectful, ethical and professional relationships
    - ii. Conduct a client interview, including: (E, Com, A)
      - 1. relevant present and past medical history
      - 2. personal, medical, environmental, psychosocial and cultural factors which may affect management
      - 3. relevant subjective and objective information

<sup>1</sup> Essential Competency Profile for Physiotherapists in Canada, October 2009.

- iii. Write a client assessment including the findings of standardized outcome measures using the SOAPIE format (P, Com)
- b. Collect relevant objective findings (Com, P)
- c. Select and apply manual therapy techniques and special tests appropriate to adult patient's condition (E)
- d. Ensure a safe environment for client and therapist at all times. (E, M)
  - i. Identify contraindications to orthopaedic conditions
  - ii. 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: (E, P)
  - i. Name the structures that could be at fault
  - ii. Identify the severity, irritability and nature of the condition
  - iii. Recognize significant clues related to the patient's condition
  - iv. Interpret manual therapy techniques and special tests
  - v. Elaborate simple working hypotheses
  - vi. Predict a realistic prognosis, anticipate frequency of visits and discharge planning
  - vii. Identify appropriate outcome measures
  - viii. Write a progress note

# 4. Outline an evidence-informed intervention plan related to the physiotherapy diagnosis

- a. Write a problem list based on the WHO International Classification of Functioning, Disability and Health Model (E, P)
- b. Develop a simple clinical impression (E, S, P)
- c. Determine short and long-term client-centered goals (E, S, P)
- d. Develop a treatment plan to address problem list and goals which consists of education, modalities, manual therapy, exercise prescription, gait training, postural retraining and functional or work related retraining (E,S,P)
- e. Educate client regarding his/her condition and its overall management
  - i. Promote active self-management (E, A, Com)
- f. Re-evaluate the effectiveness of the interventions and modify treatment plan and goals depending on client's response and progress (E)
- g. Recognize the need for referral to other medical professionals if required: MD if client came with direct access, OT for return to work or ergonomics evaluations of workstations, psychologist if necessary (E, Col)
- h. Determine when client discharge is appropriate (E)

**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 three (3) modules as follows:

- 1) Lower extremity (3 weeks)
- 2) Spine (4 weeks)
- 3) Upper extremity (4 weeks)

**Instructional Method:** Lectures will consist of review of the relevant anatomy, biomechanics and pathologies related to each of the following regions of the body:

- The lower extremity module: Ankle joint, hip joint & knee joint
- The spine module: Lx spine, SI joint, Tx spine & Cx spine
- The upper extremity module: Shoulder joint, elbow joint & wrist joint

In the CRW students will integrate the above mentioned learning objectives in a casedbased client centered approach.

In the lab new evidenced based assessment techniques and special tests will be learned. Analysis and treatment plans and techniques will be discussed.

### **Course Materials:**

### **Required texts:**

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

**Optional text:** will be available at the library

- Dutton, M. (2008). Orthopaedic Examination, evaluation and intervention. 2<sup>nd</sup> ed.
  - McGraw-Hill.
- Magee (2013). Orthopedic physical assessment,  $6^{\text{th}}$  ed. Elsevier

**Copyright of course materials:** Instructor generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

Assignments and Evaluation	
Participation:	5%
Spot check – only 1	(3%)
Assignments	(2%)
Written exams:	65%
Module 1	(15%)
Date: TBA	
Module 2	(15%)
Date: TBA	
Module 1, 2 & 3	(35%)
Date: Final exam period (TBA)	
Practical exams:	30%
OSCE lower quadrant	(15%)
Date TBA	
OSCE upper quadrant	(15%)
Date Final exam period (TBA)	

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

### **Special Requirements for Course Completion and Program Continuation:**

<u>For U3 students</u>, 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 document.

**Plagiarism/Academic Integrity:** [Amended by Senate on April 17, 2013]: 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 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 conduite de l'étudiant et des</u> <u>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 <u>Office for Students with</u> <u>Disabilities</u> at 514-398-6009 before you do this.

Attendance: Students are expected to attend <u>all lectures</u> and are required to attend <u>all clinical reasoning workshops and labs</u>. <u>Students who have missed more</u> <u>than 15% of laboratory or small group sessions, without prior approval, will</u> <u>have a 10% deduction of their final grade</u>. This rule applies to labs and to all required workshops, seminars or professional activities.

Dress Code: Appropriate clothes (i.e. shorts and T-shirt) will be required for all labs.

**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.