## **POTH 636 PHYSICAL THERAPY IN PEDIATRICS**

**Credits:** 3 credits

**Prerequisites:** For the students in the first year of the M.Sc. (A) PT program,

successful completion of all Qualifying year /U3 courses as well as successful completion of the Introductory Pediatric Physical Therapy Course. The maximum number of students permitted

to take this course is set at 15.

**Instructors:** 

Course coordinator and primary instructor:

Isabelle Gagnon PT PhD Office: Hosmer House H203 514-398-4400 ext. 099057 Isabelle.gagnon8@mcgill.ca

Other instructors:

Clinicians from Pediatric Settings in Montreal

**Course Description:** This three-credit course emphasizes the principles of / and practical issues relating to pediatric habilitation and rehabilitation pertinent to the practice of physical therapy.

**Expanded Course Description**: Through a philosophical approach that includes aspects such as client/family-centered care, awareness of cultural diversity, psychosocial dimensions of disability, and accountability/evidence-based practice as well as by emphasizing clinical reasoning, this practical and problem-based course, applies the frameworks of neurological, orthopedic and cardio-respiratory rehabilitation to the assessment and treatment of various pediatric conditions.

**Foundational Knowledge**: This course will draw on knowledge, attitudes and skills previously acquired by the students. It is essential that basic principles and approaches in paediatric orthopaedic, neurological and cardio-respiratory rehabilitation taught in PHTH-606 be well integrated prior to participating in this course (including underlying assumptions and scientific basis).

Course Structure: The course includes two classes per week comprising a 3.5-hour lecture/clinical reasoning workshop and a 3.5-hour lab/seminar per week for 9 weeks. These classes are given on campus at McGill or on-site at various pediatric settings. In the winter of 2015, classes will take place on Thursdays and Fridays from 8h30 to 12h00.

**Learning Objectives:** With attendance and active participation in class, the student will be actively engaged in achieving the following core competencies as they relate to the roles for physiotherapists<sup>1</sup> in the context of the practice of physiotherapy with children with congenital, developmental, and acquired disabilities.

## Expert

- 1. Integrate the essential pathophysiology and basis for complex orthopedic, neurological and cardio-respiratory pediatric disorders.
- 2. Apply the principles of neurological, orthopedic and cardio-vascular rehabilitation in pediatrics including the underlying assumptions and scientific basis.
- 3. Analyze the current controversies surrounding the principles of normal development, motor control and dysfunctions, as well as plasticity, adaptation and rehabilitation in pediatrics.
- 4. Use a family-centered approach when consulting with the child and his/her parents to obtain information about his/her health, associated history, previous health interventions, and associated outcomes to determine indications and contra-indications to physiotherapy intervention in children
- 5. Collect assessment data relevant to the child's and family's needs and pediatric physiotherapy practice. This includes selecting appropriate measurement tools for discrimination, prediction, and evaluation of components of the International Classification of Functioning, Disability and Health specific to each child and condition.
- 6. Analyze and interpret assessment findings as well as explain them in terms that families and children/adolescents can understand.
- 7. Establish a physiotherapy diagnosis for children presenting with complex orthopaedic, neurological and cardio-respiratory pediatric disorders.
- 8. Develop and recommend an intervention strategy that is developmentally appropriate for children of varying ages. This will include integrating basic neuroscience, musculo-skeletal concepts and kinesiology principles to construct and organize developmentally appropriate physical rehabilitation activities for children of varying ages.
- 9. Demonstrate how to implement interventions with children of varying ages, including teaching home exercises to be done by children and/or their parents.

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

- 10. Demonstrate how to evaluate the effectiveness of interventions and progress activities accordingly during interactions in clinical settings throughout the course.
- 11. Develop problem-solving skills to prepare for a successful advanced clinical placement in pediatric rehabilitation.

## Communicator

- 12. Communicate effectively with children and families as well as with other professionals during their interactions in clinical settings throughout the course.
- 13. Employ effective and appropriate verbal, nonverbal, and written communications both in interacting with children and families, with other health care professionals and peers when appropriate throughout the course.

## Collaborator

14. Establish and maintain interprofessional relationships, during group assignments and presentations

### Advocate

15. Identify the health needs and concerns of individual children and families, of populations, and communities as well as understand professional responsibility in responding to those needs.

### Scholarly practitioner

- 16. Be able to use a reflective approach towards his/her practice in pediatric physiotherapy through self-assessment during practical activities
- 17. Use appropriate research methods to further advance his/her knowledge in pediatric physiotherapy (appraise evidence; consult evidence-based websites and resources; etc.)

## Professional

- 18. Have a professional and respectful attitude when interacting with children, families as well as their peers and other professionals involved in the course
- 19. Recognize the scope of practice of pediatric physiotherapy.

## <u>Manager</u>

- 20. Identify ways that will promote effective management of practice in both public and private settings.
- 21. Understands the structure, funding and function of the health system as it relates to physiotherapy practice.

## **Instructional Methods:**

- Lecture: didactic lecture with assigned readings and presentations available through MyCourses.
- Labs and clinical reasoning workshops: hands-on skills laboratories requiring previous preparation based on case histories to promote clinical reasoning. *Attendance is compulsory*.
- Student self-directed learning: readings, reviewing and appraising evidence on selected topics; creation of a reflective journal

**Specific Course Content:** List of topics to be covered (detailed weekly schedule will be provided during the introductory lecture):

- 1. Review of pediatric evaluations and use of more specific standardized assessments.
- 2. Goal setting and Goal Attainment Scaling for pediatric rehabilitation.
- 3. Creating developmentally appropriate treatment activities
- 4. Using ICF to frame evaluation, goal setting and treatment planning
- 5. Assessment and treatment of children with neurological conditions (brain injury, seizures, autism, intellectual delays, pediatric stroke, prematurity, neuromuscular conditions).
- 6. Assessment and treatment of children with orthopedic conditions (complex pain conditions, osteogenesis imperfecta, orthopedic problems in neurological conditions).
- 7. Assessment and treatment of children with cardio-respiratory conditions (training issues, cardiac surgery).
- 8. Assessment and treatment of children with arthritis and associated conditions.
- 9. Transitions to adulthood for children with various conditions
- 10. Equipment and assistive technologies for children with disabilities

#### **Course Materials:**

Mandatory Book: Campbell, S.K. (2011) *Physical therapy for children* (4<sup>th</sup> ed) Elsevier Science pub (**in bookstore**)

Readings posted on MyCourses weekly

Copyright of course material: © 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.

# **Student Assignment and Evaluation:**

Participation, professionalism (individual)		5%
Criteria for evaluation will be provided in the introductory lecture		
Reflective journals (individual)	10%	
Criteria for evaluation will be provided in the introductory lecture		
Prerequisite knowledge quizzes (individual)		
Four different quizzes administered prior to covering new material in each of		
the following 4 areas:	development, neurological conditions,	orthoped ic
$conditions, \ cardio\text{-}respiratory\ conditions$		
Readings quizzes (individual)		10%
Quizzes provided through Mycourses covering content of assigned readings		
Assessment of an infant or toddler (group)		10%
Assessment of a pre-school child (individual)		10%
Treatment activity catalogue (individual)		15%
Evidence-based group project	Written assignment (group)	25%
	Oral Presentation (group)	5%

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: In order to pass the course, a grade of at least B- (65%) must be obtained as a total course mark. Please refer to Section 7.7 Examinations, of the 2015-16 McGill University Health Sciences Calendar for information on University regulations regarding final examinations and supplementals.

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.

**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 Code of Student Conduct and Disciplinary Procedures.

**Dress Code**: Students are expected to demonstrate professional behavior and wear appropriate attire at all times, in accordance with clinical sites specific regulations.

**Attendance:** Students who have missed more than 10% of laboratory sessions, clinical reasoning workshops or clinical site visits without a university-sanctioned reason for their absence, will see their final course mark reduced by 10%. Please refer to section on attendance in course guide.

**Right to Submit in (English or in) French** [approved by Senate on 21 January 2009]: 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. This right applies to <u>all</u> written work that is to be graded, from one-word answers to dissertations.

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. Assignments submitted late will receive a penalty of 2% per day late, including week-ends.

**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</u> with <u>Disabilities</u> at 514 398-6009 before you do this.

**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.