

POTH 636 PHYSICAL THERAPY IN PEDIATRICS

Credits: 3 credits

Prerequisites: PHTH 606 Introductory Pediatric Physical Therapy

Course coordinator and primary instructor:

Isabelle Gagnon PT, PhD

isabelle.gagnon8@mcgill.ca

Office location / office hours: Virtual office hours will be available by appointment on request. Appointment requests can be made via email to the instructor.

Communication plan: Students can contact Prof. Gagnon by email. Emails will be acknowledged within 24 hours and answered within 48 hours. The main mode of communication throughout the course will be email sent through the myCourses platform, as well as announcements on the same platform. Students are expected to check both email and myCourses at least 2x per week for this course.

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 an 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. 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).

Learning Outcomes: With attendance and active participation in class, the student will be actively engaged in achieving the following essential competencies and milestones as they relate to the domains of physiotherapy expertise, communication, collaboration, management, leadership, scholarship, and professionalism in the context of working with children with congenital, developmental, and acquired disabilities. The following learning outcomes are those designed for the whole course.

Competency Domain Completing the evaluation tasks successfully will contribute to the competency	Learning outcome On successful completion of this course, you will be able to	Related milestone	Assessment task You will be assessed on the learning outcome in evaluation task
Physiotherapy expertise	Integrate knowledge of human development across all domains with clinical decision making.	n/a	1, 2, 6
	Analyze the development of movement skills across the lifespan.	n/a	1, 2, 6
	Integrate the essential pathophysiology and basis for complex orthopedic, neurological and cardio-respiratory pediatric disorders	n/a	3, 4, 6
	Apply the principles of neurological, orthopedic and cardio-vascular rehabilitation in pediatrics including the underlying assumptions and scientific basis.	n/a	3, 6
	Analyze the current controversies surrounding the principles of normal development, motor control and dysfunctions, as well as plasticity, adaptation and rehabilitation in pediatrics.	n/a	Not assessed
	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	1.1.1; 1.1.2; 1.1.3; 1.1.5; 1.1.6; 1.3.1; 1.3.2; 1.3.4; 1.3.5	1, 2, 6
	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.	1.3.7	1, 2, 6
	Analyze and interpret assessment findings as well as explain them in terms that families and children/adolescents can understand.	1.4.1; 1.4.2	1, 2, 6
	Establish a physiotherapy diagnosis and prognosis (when applicable) for children presenting with complex orthopaedic, neurological and cardio-respiratory pediatric disorders.	1.4.2; 1.4.3; 1.4.4	6
	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.	1.4.1; 1.4.2; 1.4.4; 1.4.5; 1.4.6; 1.5.1; 1.5.2	5

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	Demonstrate how to implement interventions with children of varying ages, including teaching home exercises to be done by children and/or their parents.	1.5.2; 1.5.3	5
	Demonstrate how to evaluate the effectiveness of interventions and progress activities accordingly during interactions in clinical settings throughout the course.	1.5.6; 1.5.7; 1.6.1	5
	Develop problem-solving skills to prepare for a successful advanced clinical placement in pediatric rehabilitation.	1.5.5; 1.5.6; 1.5.7; 1.7.1;	5
Communication	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.	2.1.1; 2.1.2; 2.1.3; 2.1.4; 2.2.1; 2.2.2; 2.2.3; 2.3.1; 2.3.2; 2.3.5; 2.4.3;	All group assignments and 1, 2, 5
Collaboration	Establish and maintain collaborative interprofessional relationships during group assignments and presentations.	3.1.1	All group assignments and 5
	Identify situations when children may benefit from collaborative care (intra/inter disciplinarity)	3.1.1	
Management	Identify ways that will promote effective management of practice in both public and private settings.	4.1.4; 4.2.1; 4.2.2;	Not assessed
	Understands the structure, funding and function of the health system	4.2.1; 4.2.2	Not assessed
	Apply quality improvement strategies in direct service provision	4.4.1	Not assessed
	Use outcome data to evaluate service delivery	4.4.3	Not assessed
Leadership	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.	5.1.2; 5.1.3; 7.4.1; 7.4.2	Not assessed
Scholarship	Use evidence-informed approach towards his/her practice in pediatric physiotherapy through self-assessment during practical activities	6.1.1-6.1.5	Not assessed
	Use appropriate research methods to further advance his/her knowledge in pediatric physiotherapy (appraise evidence; consult evidence-based websites and resources; etc.)	6.4.1; 6.4.2;	3
Professionalism	Have a professional and respectful attitude when interacting with children, families as well as their peers and other professionals involved in the course	7.4.1; 7.4.2;	1, 2, 5
	Recognize and be guided by the scope of practice of pediatric physiotherapy.	7.4.3; 7.4.4	3, 4, 5

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Instructional methods:

- The course activities will include preparatory work prior to in-class time, lectures, clinical reasoning session, practical skills teaching, individual and group projects. Students are expected to be available during scheduled class time (Mondays and Wednesdays from 8h30 to 12h30). Time commitment expectation for this course is aligned with McGill guidelines that one credit equals about 45 hours of student work. (Thus, this three-credit course equals about **135 hours of student work**.) Those hours will include all contact time (e.g., lecture, laboratory, tutorial, and conference time) for a course, as well as the time students spend doing assessment tasks, preparing for class, and reviewing material for a course.
- Learning activities will take place in person, on McGill main campus and in various hospital settings in the Montreal area
- Assessment activities will take place both in-person and on your own time (details provided);
- If a student needs to be absent for a valid reason, arrangements can be made to find alternatives to participation in learning and assessment activities.

Expectations for Student participation: Class participation (10%) is an important component of learning and professional development in this course. Participation includes regular attendance, preparation for class, active engagement in discussions and learning activities, contributions to small-group and whole-class work, and adherence to class norms. Near the end of the term, students will complete a self-assessment of their participation. The instructor will review this self-assessment and may adjust the assigned grade based on documented evidence of attendance and the quality and consistency of participation in course activities throughout the term. Participation is evaluated not only by the frequency of contributions, but also by the extent to which students are actively engaged in the learning process and contribute to a supportive learning environment.

Class recordings: This class is located in a room that does not allow class recording. If you feel that a recording would be helpful to your learning, please contact the instructor right away.

Course Materials:

- **Required text:** No required textbook for this course.
- **Readings:** Required readings will be posted weekly on MyCourses. These readings will be contextualized in relation to course content and learning activities. A complete reading list will be provided on the first day of class.

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.*

Unauthorized distribution of course materials may constitute a breach of copyright and may be subject to follow-up under McGill University's *Code of Student Conduct and Disciplinary Procedures*. This restriction includes uploading instructor-generated course materials to artificial intelligence (AI) platforms, large language model (LLM) tools, or other third-party services, with the exception of McGill-approved platforms where such use is permitted.

Course Content:

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 and progressions
4. Using ICF to frame evaluation, goal setting and treatment planning

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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
11. Introduction to quality improvement activities in practice

Summary Schedule: TBD. Available January 2027

Student Assignment and Evaluation:

Planned Assessments

#	Assessment task	Individual or Group	Weighing (%)
1	Clinical reflection journal—intraprofessional collaboration	Individual	5
2	Assignment 1: Assessment of an infant	Pairs	10
3	Assignment 2: Treatment activities manual	Individual	15
4	Assignment 3: Assessment of a pre-school child	individual	15
5	Assignment 4: Evidence based review poster	individual	15
6	My 3s	Individual	15
7	Clinical Reflection Journals—site visits	Individual	15
8	Participation	Individual	10

Assessment detailed with due dates

Assessment task #	Name	Due Date	Weight
1	Clinical reflection journal—intraprofessional collaboration	TBD	5
2	Assignment 1: Assessment of an infant	TBD	10
3	Assignment 2: Treatment activities manual	TBD	15
4	Assignment 3: Assessment of a pre-school child	TBD	15
5	Assignment 4: Evidence based review poster	TBD	15
6a	My3s quizzes	Mackay	3
6b		Shriners	3
6c		MCH-Oncology	3
6d		MCH-NICU-PICU	3
6e		Private practice	3
7a	Clinical Reflection Journals—site visits	Visit 1	5
7b		Visit 2	5
7c		Visit 3	5
8	Participation	--	10

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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: 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 McGill 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: McGill University and the Faculty of Medicine and Health Sciences value academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the [McGill University Code of Student Conduct and Disciplinary Procedures](#) and the [Faculty of Medicine and Health Sciences Code of Conduct](#)

L'université McGill et Faculté de Médecine et des Sciences de la Santé attachent une haute importance à l'honnêteté académique. Ils incombent 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 [Université de McGill Code de conduite de l'étudiant et des procédures disciplinaires](#) et [Faculté de médecine et des sciences de la santé](#).

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

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.

Language of submission: 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. This does not apply to courses in which acquiring proficiency in a language is one of the objectives." (Approved by Senate on 21 January 2009)

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.

Inclusive learning environment: As the instructor of this course, I endeavor to provide an inclusive learning environment. I would like to acknowledge that we are all individuals with multiple socio-cultural identities that intersect and shape our worldview with possible biases. My commitment to you as your instructor is to minimize systemic forces of oppression within the classroom such as ableism, classism, racism, sexism, transphobia, and heterosexism in efforts to create a safe learning environment for all of us. I ask that you also join me in this commitment to foster respect for one another, enhance solidarity, and build community. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and/or [Student Accessibility and Achievement](#).

Appropriate use of learning spaces: Learning spaces related to this course, such as the classroom/lab/myCourses website, are academic resources to be used exclusively for course-related content.

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Artificial Intelligence (AI) tools: Use of generative AI: Students may, at times, use artificial intelligence tools, including generative AI, in this course as learning aids. However, students are ultimately accountable for the work they submit, including the accuracy of information included in any assignment, quiz, or exam. In the context of assignments, content produced by an artificial intelligence tool must be cited appropriately. Many organizations that publish standard citation formats are now providing information on citing generative AI (e.g., MLA: <https://style.mla.org/citing-generative-ai/>).

Charter of Students' Rights: Additional policies governing academic issues that affect students can be found in the [McGill Charter of Students' Rights](#).

Learning support resources: Consult [learning resources](#) on topics such as time management, study strategies, group work, exam prep, and more. For further individualized support, check out the programs and resources offered by [Student Accessibility and Achievement](#).

Mercury course evaluations: [Mercury course evaluations](#) are one of the ways that McGill works towards maintaining and improving the quality of courses and students' learning experience. You will be notified by email when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.

Pronouns: Please contact me if you would like me to refer to you by a different name than the [name indicated](#) in your student record or to inform me of your pronouns.

Reporting harassment, discrimination, or sexual violence: The [Office for Mediation and Reporting \(OMR\)](#) offers online and in-person confidential [consultations](#) for any student seeking to report harassment, discrimination, or sexual violence. The OMR also conducts mediation and investigations.

Respect: The University is committed to maintaining teaching and learning spaces that are respectful and inclusive for all. To this end, offensive, violent, or harmful language arising in course contexts may be cause for disciplinary action.

Sexual violence response, support, and education: The [Office for Sexual Violence Response, Support and Education \(OSVRSE\)](#) offers confidential and non-judgmental services, receives and coordinates responses to situations of sexual and gender-based violence, and works to prevent sexual violence through education and awareness raising. You can [access OSVRSE services](#) even if you don't formally report an experience.

Wellness: Many students may face mental health challenges that can impact not only their academic success but also their ability to thrive in our campus community. Please reach out for support when you need it from the Wellness Hub; [wellness resources](#) are available on campus, off campus, and online.

Workload management skills: If you are feeling overwhelmed by your academic work and/or would like to further develop your time and workload management skills, don't hesitate to seek support from [Student Services](#).

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