



School of Physical and Occupational Therapy



SP & OT



EXCELLENCE THROUGH GROWTH

**MASTER OF SCIENCE, APPLIED (PHYSICAL THERAPY):
COURSE GUIDE 2011-2012**

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I. Master of Science, Applied in Physical Therapy

A. Important Dates

FALL 2011

July 28 – September 1	Registration period
September 1	Classes officially begin
September 13	Course add/drop deadline
December 7	Study day Wednesday
December 8	Exams begin
December 22	Classes and Exams end

LEGAL HOLIDAYS

September 5	Labour Day
October 10	Thanksgiving Day

WINTER 2012

January 3	Classes officially begin
January 15	Master's Program application deadline
January 18	Course change (add/drop) deadline
February 20 - 24	Study Week
February 27	Classes begin
April 14 & 15	Study days Saturday and Sunday
April 17	Exams begin
April 30*	Classes and Exams end

LEGAL HOLIDAYS

January 1	New Year's Day Sunday (Administrative offices will be closed Monday January 2)
April 6	Good Friday
April 9	Easter Monday

Note (a) In extenuating circumstances exams may be held outside of McGill exam period **(b)** Due to 7 weeks of clinical practicum beginning January 3, followed by 1 week spring break, the M1 academic courses start on February 27 and end on April 30 (including exam period).

B. Curriculum Plan 2011-2012

M1 SUMMER TERM

PHTH 571	Clinical Practicum 1	7cr
PHTH 572	Clinical Practicum 2	7cr

M1 FALL TERM

POTH 612	Advanced Research Methods	3cr
PHTH 622	Integrated Pain Management	3cr
PHTH 623	Differential DX and Management	3cr
1	Professional Complementary Course	3cr
1	Complementary Course	3cr

M1 WINTER TERM

PHTH 573	Clinical Practicum 3	7cr
POTH 602	Educational Methodology	3cr
2	Professional Complementary Courses	3cr

M2 SUMMER TERM

POTH 624	Master's Project	
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Note Implemented and submitted by the end of August. To be credited in the Fall term of M2.

M2 FALL TERM

PHTH 620	Clinical Practicum 4	7cr
POTH 624	Master's Project	6cr

PROFESSIONAL COMPLEMENTARY COURSES

PHTH 641	Advanced Topics in Cardiorespiratory Rehab	3cr
PHTH 661	Sport Physiotherapy	3cr
POTH 636	Advanced Pediatrics in Physical Therapy	3cr
POTH 637	Cancer Rehabilitation	3cr
POTH 682	Promoting Healthy Activity	3cr
POTH 639	Motor Control	3cr
POTH 641	Topics in Cardiorespiratory Rehabilitation	3cr
PHTH 662	Advanced Manual Therapy	3cr

COMPLEMENTARY COURSES FROM GRADUATE PROGRAM IN REHABILITATION SCIENCES

POTH 620	Measurement in Rehabilitation I	3cr
POTH 685	Perception and Action	3cr

C. Course Guides

The following course guides are meant to provide an overview of each course. Please be sure to confirm course details with the appropriate course instructor or coordinator at the start of the term.

PHTH 571 PHYSICAL THERAPY CLINICAL PRACTICUM 1

Credits: 7

Prerequisites: PT Ortho Management (PHTH-550), Integrated Ortho Management (PHTH-560), PT Neuro Rehab (PHTH-551), Integrated Neuro Rehab (PHTH-561), Cardiorespiratory Rehab (PHTH-552) and Strategies in PT Professional Practice (PHTH-570). Prerequisites for Clinical Practicum 1 also include a compulsory 2-day (or equivalent) workshop on Principles for Moving Patients Safely (PDSB).

Instructors: Liliane Asseraf-Pasin
Faculty Lecturer & Academic Coordinator of Clinical Education (ACCE)
Office: Davis House D7
Office hours: TBA
liliane.asseraf.pasin@mcgill.ca

Isabel Audette
Faculty Lecturer & Assistant Academic Coordinator of Clinical Education (AACCE)
Office: Davis House D4
Office hours: TBA
isabel.audette@mcgill.ca

On-site Clinical Coordinators and Clinicians from McGill Affiliated Hospitals will also be involved.

Course Description: This 7 week course is the first, in a series of four (4), clinical practicum where the student will be able to evaluate and treat patients with simple musculoskeletal, cardiovascular and/or neurological conditions across the lifespan.

Students are also expected to complete 6 mandatory online clinical modules of one hour each and two (2) mandatory seminars of two (2) hours.

These modules and seminars will need to be completed during the QY/U3 Winter semester. The modules will be available through WebCT under the clinical course PHTH-571.

Note Not completing modules and not attempting seminars may delay subsequent practicum.

Course Structure: The clinical practicum courses are full-time, beginning in the summer term of M1 and continuing at set intervals during the program. PPTH-571 begins on the first Monday of the month of May in the summer semester of M1. The clinical practicum courses take place at the MUHC and other McGill affiliated facilities, such as other hospitals, CLSC, CHSLD, private clinics, rehabilitation centres, schools, and industries.

In addition to the Montreal region facilities, a number of out-of-province affiliated sites are available upon request. The Physical Therapy Program has developed specific guidelines pertaining to out-of-province practicum, which follow the guidelines of the National Academic Coordinators of Clinical Education in Physiotherapy (NACEP) for out-of-province practice. For out-of province placements travel and accommodation are the student's responsibility.

Instructional Method: Supervision is provided by a Physical Therapist to assist the transition of the novice student to an entry-level practitioner. Clinical educators are encouraged to use the 2:1 model of supervision to enhance clinical reasoning through reciprocal peer coaching. In conjunction with the on-site practicum experience, web-based technology tools are available to facilitate the student's learning. Clinical practicum experiences in different sites may vary according to the types of clients available.

Learning Outcomes: The student will be able to evaluate and treat patients with musculoskeletal, cardiovascular and/or neurological conditions.

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

General Learning Outcomes:

1. Practice in a safe manner that minimizes risk to patient, self and others.
2. Demonstrate professional behaviour during interactions with others and adhere to ethical and legal practice standards.
3. Demonstrate effective interpersonal relations and communications with clients and their environment, physical therapists, and other members of the health care team.

4. Engage in various additional learning opportunities specific to a particular setting (teaching rounds, in-service, home visits, administrative committees).
5. Adapt the delivery of physical therapy care to reflect respect for and sensitivity to individual differences.
6. Demonstrate portfolio collection techniques.
7. Understands the role of PT and other team members in this setting.

Specific Learning Outcomes: Students must obtain a **minimum of 3** for **criteria 6 to 24** on the CPI visual analogue scale, and a **minimum of 8** for **criteria 1 to 5** (Flagged Items).

By the end of the first clinical placement the student, with the assistance of the supervisor, will:

1. Demonstrate organizational ability to optimize use of time.
 - a. Begin to organize schedule and manage time.
 - b. Set priorities for patient assessment and treatment.
2. Manage space, equipment and other resources to optimize clinical practice.
3. Integrate and apply theoretical knowledge of the basic and clinical sciences for neurological, orthopedic, pediatric and cardio-respiratory conditions.
4. Demonstrate the use of evidence-based practice to supplement and reinforce the material covered in the academic curriculum.
5. Perform a basic subjective and objective assessment of clients seen by physical therapists using the ICF model.
6. Develop analytical and interpretive abilities for effective evaluation of the patient and planning of short and long-term client centered goals.
7. Begin to use clinical reasoning skills to design and apply a physical therapy intervention that takes into consideration the needs of the patient and the discharge potential.

8. Generate physiotherapy differential diagnosis and predict prognosis for simple cases.
9. Develop his/her ability to execute effective therapeutic procedures.
10. Document information obtained from a physical therapy assessment using the SOAPIE method of charting in a timely manner.
11. Be responsible for 50% of patient load of a PT from admission to discharge during the last 10 consecutive days of stage and will:
 - a. Question and justify decisions made.
 - b. Make decisions regarding evaluations and treatment planning based on sound judgment and in consideration of all performance areas.
 - c. Attend meetings/rounds and be prepared to provide input into his/her cases.

Required Text:

1. *Principles for Moving Patients Safely*. ASSTSAS 1999.

This text is required for workshop participation and a reference for all future clinical practica.

2. Code of Ethics. La Gazette Officielle du Québec, 1999.

Student Assignment and Evaluation:

Case Presentation: Students are expected to present a 30 to 60- minute evidence-based presentation to the clinical staff and students present in the clinical site. The presentation may be case-based or on a specific topic of interest approved by the clinical supervisor.

Evaluation: The Clinical Performance Instrument (CPI) is based on 24 criteria. **Five performance dimensions are used to evaluate student's performance: these are 1) Quality of intervention; 2) Supervision/Guidance required; 3) Consistency of performance; 4) Complexity of tasks/environment; and 5) Efficiency.** The CPI incorporates knowledge, skills, attitudes and multiple sources of information such as self-assessment, presentations, and peer review to make decisions about readiness to practice. (Appendix 2 – CPI).

With each Clinical Practicum, the student is expected to improve his/her weaknesses and increase his/her confidence and competence to that expected of an Entry-Level Physical Therapist. By the end of the first Clinical Practicum, the student is expected to carry **50% of the patient load of an Entry-Level Physical Therapist for the last 10 consecutive days.**

Although each clinical educator evaluates a student's performance, it is the ACCE who is responsible for determining acceptable levels of performance for each clinical experience and, who ultimately assigns the grade of PASS/FAIL.

Plagiarism/Academic Integrity: 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course. Student's CPI self-evaluation can be filled out in French or in English.

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 398-6009 before you do this.

PHTH 572 PHYSICAL THERAPY CLINICAL PRACTICUM 2

Credits: 7

Prerequisites: Successful completion of clinical practicum I, PT Ortho Management (PHTH 550), Integrated Ortho Management (PHTH 560), PT Neuro Rehab (PHTH 551), Integrated Neuro Rehab (PHTH 561), Cardiorespiratory Rehab (PHTH 552) and Strategies in PT Professional Practice (PHTH 570). Prerequisites for Clinical Practicum 2 also include a compulsory 2-day (or equivalent) workshop on Principles for Moving Patients Safely (PDSB).

Instructors: Liliane Asseraf-Pasin
Faculty Lecturer & Academic Coordinator of Clinical Education (ACCE)
Office: Davis House D7
Office hours: TBA
liliane.asseraf.pasin@mcgill.ca

Isabel Audette
Faculty Lecturer & Assistant Academic Coordinator of Clinical Education (AACCE)
Office: Davis House D4
Office hours: TBA
isabel.audette@mcgill.ca

On-site Clinical Coordinators and Clinicians from McGill Affiliated Hospitals will also be involved.

Course Description: This 7-week course is the second in a series of four clinical practicum where the student will be able to evaluate and treat patients with musculoskeletal, cardiovascular and/or neurological conditions across the lifespan.

This course follows PHTH-571 and may be completed in the summer of M1 after successful completion of PHTH-571 or in the following winter session, according to availability of placements and student preference.

The course includes one mandatory individual meeting of 15min with the ACCE or the AACCE that will be schedule during the fall semester.

Course Structure: The clinical practicum courses are full-time, beginning in the summer term of M1 and continuing at set intervals during the program. The clinical practicum courses take place at the MUHC and other McGill affiliated facilities, such as other hospitals, CLSC, CHSLD, private clinics, rehabilitation centres, schools, and industries.

In addition to the Montreal region facilities a number of out-of-province and international affiliated sites are available upon request. The Physical Therapy Program has developed specific guidelines pertaining to out-of-province and international practicum, which follow the guidelines of the National Academic Coordinators of Clinical Education in Physiotherapy (NACEP). For out-of province and international placements travel and accommodation are the student's responsibility.

Instructional Method: Supervision is provided by a Physical Therapist to assist the transition of the novice student to an entry-level practitioner. Clinical educators are encouraged to use the 2:1 model of supervision to enhance clinical reasoning through reciprocal peer coaching. In conjunction with the on-site practicum experience, web-based technology tools are available to facilitate the student's learning. Clinical practicum experiences in different sites may vary according to the types of clients available.

Learning Outcomes: The student will be able to evaluate and treat patients with musculoskeletal, cardiovascular and/or neurological conditions.

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

General Learning Outcomes:

1. Practice in a safe manner that minimizes risk to patient, self and others.
2. Demonstrate professional behaviour during interactions with others and adhere to ethical and legal practice standards.
3. Demonstrate effective interpersonal relations and communications with clients and their environment, physical therapists, and other members of the health care team.
4. Engage in various additional learning opportunities specific to a particular setting (teaching rounds, in-service, home visits, administrative committees).

5. Adapt the delivery of physical therapy care to reflect respect for and sensitivity to individual differences.
6. Demonstrate portfolio collection techniques.
7. Understands the roles of PT and other team members in this setting.

Specific Learning Outcomes: Students must obtain a **minimum of 4** for **criteria 6 to 24** on the CPI visual analogue scale, and a **minimum of 8** for **criteria 1 to 5** (Flagged Items).

With *the supervision* of the supervisor, student must be able to:

1. Optimize use of time.
 - a. Organize schedule and manage time.
 - b. Set priorities.
 - c. Becoming increasingly self-directed.
2. Manage space, equipment and other resources to optimize clinical practice.
3. Integrate and apply theoretical knowledge of the basic and clinical sciences for neurological, orthopedic, pediatric and cardio-respiratory conditions.
4. Demonstrate the use of evidence-based practice to supplement and reinforce the material covered in the academic curriculum.
5. Perform basic subjective and objective assessment of new clients using the ICF model.
6. Develop analytical and interpretive abilities for effective evaluation of the patient and planning of short and long-term client centered goals.
7. Use clinical reasoning skills to design and apply a physical therapy intervention that takes into consideration the needs of the patient and the discharge potential.
8. Generate simple physiotherapy differential diagnosis and predict prognosis for simple cases.

9. Develop student's ability to execute effective therapeutic procedures.
10. Document information obtained from a physical therapy assessment using the SOAPIE method of charting.
11. Be responsible for **60%** of patient load of a PT from admission to discharge during the last 10 consecutive days of stage and will:
 - a. Question and justify decisions made.
 - b. Make decisions regarding evaluations and treatment planning based on sound judgment and in consideration of all performance areas.
 - c. Attend meetings/rounds and discuss his/her cases.

Required Text:

1. *Principles for Moving Patients Safely*. ASSTSAS 1999.

This text is required for workshop participation and a reference for all future clinical practica.

2. Code of Ethics. La Gazette Officielle du Québec, 1999.

Student Assignment and Evaluation:

Case Presentation: Students are expected to present a 30 to 60-minute evidence-based presentation to the clinical staff and students present in the clinical site. The presentation may be case-based or on a specific topic of interest approved by the clinical supervisor.

Evaluation: The Clinical Performance Instrument (CPI) is based on 24 criteria. **Five performance dimensions are used to evaluate student's performance: these are 1) Quality of intervention; 2) Supervision/Guidance required; 3) Consistency of performance; 4) Complexity of tasks/environment; and 5) Efficiency.** The CPI incorporates knowledge, skills, attitudes and multiple sources of information such as self-assessment, presentations, and peer review to make decisions about readiness to practice. (Appendix 2 – CPI).

With each Clinical Practicum, the student is expected to improve his/her weaknesses and increase his/her confidence and competence to that expected of an

Entry-Level Physical Therapist. By the end of the second Clinical Practicum, the student is expected to carry **60% of the patient load of an Entry-Level Physical Therapist during the last 10 consecutive days of stage.**

Although each clinical educator evaluates a student's performance, it is the ACCE who is responsible for determining acceptable levels of performance for each clinical experience and, who ultimately assigns the grade of PASS/FAIL.

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POTH 612 ADVANCED RESEARCH METHODS

Credits: 3

Pre-requisite: **(Recommended)** An introductory course in research methods and a course in intermediate level statistics or equivalent.

Lecturers: Sara Ahmed, Liliane Asseraf-Pasin, Skye Barbic, Heather Lambert, Nancy Mayo, Barbara Mazer, Patricia McKinley, Anita Menon, Judith Soicher

Course Description: This individualized, multi-module course is geared to intermediate–advanced learning levels to help students design and implement research projects and analyze results according to the needs for their entry level Master’s project.

Expanded Course Description: This course is made up of several introductory lectures, followed by 4 modules targeting different aspects of research design and execution. The final module focuses on the group Master’s projects. The topics covered include: cross sectional surveys, systematic reviews and meta analysis, qualitative designs and methods, knowledge translation studies, quantitative data analysis, qualitative analysis, psychometric and clinical measurement studies. Topics may also include experimental / laboratory methods in rehabilitation and experimental measurement, depending on instructor expertise and the specific group projects being carried out. The final required module (module #4) will focus on protocol development and aspects of implementation of the Master’s project.

Course Structure: The design, data analysis and measurement modules will each be delivered in a 6-7 lecture block. There will be two 1.5-hour in-class sessions per week. Different modules may be offered each year.

Students will be assigned to the most appropriate modules for their Master’s project. The final module (module #4) will be taken by all students, and is specifically related to the design and implementation of the Master’s project.

Learning Outcomes: On completion of this course the student will:

1. Write general and specific objectives for a study
2. Select an appropriate study design
3. Carry out the steps to conduct a literature review
4. Describe ethical issues related to the study design
5. Select appropriate outcomes for the study

6. Formulate a hypothesis, test a hypothesis and / or estimate a parameter
7. Describe biases relating to specific study designs and selected outcomes
8. Select appropriate statistical tests or interpretative methods of inquiry
9. Plan the required analyses
10. Write a research protocol

Course Content: Detailed content will be distributed at the beginning of each module. A brief synopsis of the content of each module is presented below.

Cross-sectional surveys: Asking survey questions; designing successful surveys; survey sampling; survey modes (self-administered and mailed surveys; telephone and in person interviews); measuring survey reliability and validity; analysis of survey data.

Systematic Reviews and Meta Analysis: The systematic review process; strengths and limitations of the method; formulation of the review question; search for the literature evidence; quality assessment of studies; data extraction; meta analytic methods; report writing.

Qualitative designs and methods: Traditions and methodologies in qualitative research; sampling methods; designing data collection strategies; trustworthiness; documentation of qualitative research.

Knowledge Translation Studies: Evidence from the literature; clinical practice guidelines; a conceptual model; dissemination and implementation strategies; barriers and facilitators of change; effectiveness of change strategies.

Quantitative Data Analysis: Types of numerical data; identifying the measurement scale of underlying construct of the test or measure used; uses of statistics; matching the analysis to the measurement scale of the key variables; interpreting numerical data in clinical rehabilitation studies; presenting the results in a clear and meaningful manner; the art and science of casting tables.

Qualitative Analysis: Formulating qualitative interview questions; conducting a 20-minute interview; Analyzing data using the constant comparative method; developing a concept map based on findings; transcribing data and using N-Vivo software to code data; introduction to narrative analysis; exploring concepts of triangulation.

Measurement: Content development for patient-reported and therapist-observed outcomes; studies to estimate reliability; studies to estimate validity; approaches to

measuring responsiveness; interpreting scale scores; translation and cultural adaptation of scales.

Evolution of outcomes in health care and rehabilitation; rehabilitation outcomes; classification of outcomes for clinical studies; reviewing the measurement properties (reliability; validity and responsiveness) of instruments; meaningful change; selecting measures for research studies and program evaluation.

Required Module – Group Projects: Module 4 is compulsory for all students. In this module, the students will be expected to develop the first complete draft of their entry level Master’s project protocol along with accompanying consent forms and appendices where indicated. Students will work with members of their supervisory committee in conjunction with the course coordinator for POTH 624 –Master’s Project (Dr. P. McKinley) to complete this module.

Required Texts: No text is required for this course. Each instructor will provide students with a reading list containing articles and/or chapters available online. Readings from the recommended texts may also be assigned.

Recommended Texts:

Butler-Kisber, L. (2010). Qualitative Inquiry: Thematic, Narrative and Arts-Informed Perspectives, Sage Publications Ltd.

Portney, L.G. & Watkins, M.P. (2004). Foundations of Clinical Research: Applications to Practice. Appleton and Lange; Prentice Hall.

Student Evaluation: Evaluation of learning will be ongoing throughout the term following the completion of each module and will include both formative and summative evaluations. Each module will be equally weighted at 25%. Several evaluation methods will be used depending on the content of the module and number of students enrolled in the module. These comprise a thematic paper, a critical appraisal of a methodological paper, written in-class or take home exams, group or individual presentations, and peer or self-reflective evaluation.

Mark Distribution: Specific evaluation breakdown will be provided on the first day of each module.

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Disciplinary Procedures. For more information please refer to:
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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 398-6009 before you do this.

PHTH 622 INTEGRATED PAIN MANAGEMENT

Credits: 3

Prerequisites: Successful completion of all U3/qualifying year courses including Clinical Affiliation requirements

Instructor: Lesley Singer BSc PT, MSc
Lesley.singer@mcgill.ca

Course Objective: Understanding Chronic Pain from the neurophysiology to the psychosocial factors, and how to treat and assess it.

Course Structure: This lecture/seminar course takes place in the fall term, three (3) hours per week once a week for 15 weeks. Students will attend lectures, participate in problem-solving sessions and case presentations.

Student Learning Objectives: On completion of this course, the student will:

- a. Integrate the anatomical and neurophysiological bases of pain perception, including peripheral and central mechanisms, as well as pain modulation.
- b. Use psychological and behavioural attributes of pain in the analysis of chronic pain syndromes.
- c. Explain and evaluate the theories of pain relief in terms of their physical, physiological, behavioural, psychological and pharmacological bases.
- d. Interpret the pain experience in the context of Individual and group differences as well as differences due to social and environmental context, using these variables during the assessment and management of specific cases.
- e. Differentiate acute, chronic and recurrent pain in terms of mechanisms, assessment and management.
- f. Plan interventions for chronic pain syndromes e.g. phantom-limb pain, hemiplegic-shoulder pain, fibromyalgia, neuropathic pain.
- g. Using a multidisciplinary or multi-skilled approach, design treatment plans that integrate knowledge of the physical, physiological, behavioural, psychological and pharmacological characteristics of specific pain syndromes.

- h. Discuss ethical issues related to traditional, alternative, and complementary therapies.

Student Assignment and Evaluation:

Assignment	30%
Case presentation (oral)	25%
Final Exam (written)	40%
Peer review	5%

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 3.6 Examinations, of the 2011-2012 [McGill University Health Sciences Calendar](#) for information on University regulations regarding final examinations and supplementals.

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

Plagiarism/Academic Integrity: 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

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 Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site <http://www.mcgill.ca/integrity>).

Dress Code: Appropriate for a professional.

Attendance: Students are required to attend all scheduled classes. Students who have missed more than 10% 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. This rule applies to labs and to all required workshops, seminars or professional activities.

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course.

Consequences of Not Completing Assignments as Requested: An individual who does not complete a required assignment and who does not have a university recognized reason for deferral will receive a 0 in that portion of the course. Assignments submitted late will receive a deduction of 2% per day, including weekends.

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 398-6009 before you do this.

Course Content: By week based on 15 weeks. Room TBA

Date	Lecturer	Period	Topic
Tues Sept. 6 8:30-11:30	L Norris	1	A) History of pain B) Introduction – Definitions and conceptual framework for pain and psychosocial rehabilitation/ Role of the PT/
Tues Sept. 13 8:30-11:30	F. Cosia & P. Mazzone L Norris	2	A) Fibromyalgia B) Intro to types of chronic pain
Tues Sept. 20 8:30-11:30	L.Norris	3	A) Pathways, pains /peripheral and central sensitization B) The psychosocial Risk Factors for chronicity
Tues Sept. 27 8:30-11:30	L. Norris	4	A) Workshop B) Pain Beliefs of Clinicians/ Education Note You should have your oral / written topic chosen & Ok'd by now
Tues, Oct. 4 8:30-11:30	L Norris	5	A) Low Back Pain – Management & Best practices B) Md role in Chronic Pain (incl. Pharmacology)

Date	Lecturer	Period	Topic
Tues Oct. 11 8:30-11:30	L Norris	6	A) Peripheral Neuropathies – Some Diseases and Mechanisms B) Pain Assessment & Management MSK
Tues Oct. 18 8:30-11:30	L. Norris	7	A) Management cont. B) Workshop
Tues Oct. 25 8:30-11:30	L. Norris	8	A) The Healthcare System/Ethical considerations B) Discussion Is chronic pain all the same?? WAD best practices
Tues Nov 1 8:30-11:30	L Norris	9	A) Presentations B) Presentations
Wed Nov 2*	???	IDClasses*	More information TBA Required lecture Interdisciplinary session
Tues Nov 8 8:30-11:30	L. Norris	10	A) Presentations B)The Chronic Pain patient
Tues Nov. 15 8:30-11:30	B. Nedelec D. Lussier / Marie-Josée Rivard	11	A) Burns B)Pain in Geriatrics & Pharmacology & Aging
Tues Nov.22 8:30-11:30	R. Joyal	12	A) Chronic Pain in Children
Tues Nov. 29 8:30-11:30	L. Norris	13	A) Review B) discussion/wrap up
Tues Dec 6 8:30-11:30	Study Day	14	No Class Written assignment is due
	FINAL EXAM	15	Three-hour multiple choice and short answer Room TBA
Compulsory Interdisciplinary class time, room and topic TBA			

Student Assignments:

A. General

- a. Students will work in self-selected groups of five approved by the professor. There will be a written and oral component to each topic.
- b. The topic of the assignments must be pre-approved.

B. Assignment (30%)

- a. Each group of students will conduct a search and write an in-depth, evidence-based critical review of the literature on either a) a specific evaluation method for chronic pain or b) treatment plan consisting of two distinct treatment options. Students should use a bio-psychosocial model and the **level of evidence** (a copy of level of evidence information will be posted on the course website) that supports commonly used management practices. The paper should evaluate treatment plans or evaluation tools that are commonly used in today's healthcare system.
- b. The text should be about 15 double-spaced pages of Arial 10 or Times Roman 12 text within 2 cm margins and referenced. APA Guidelines for scientific writing should be followed for references. (A copy is found on the course web site.)
- c. The report is due by midnight Dec 6, 2011.

Comments about choosing topics for the group exercise

Possible Topics: Assessment tools- Impact, ICF, another method in the literature or from a clinical rotation, or your own evaluation method which will cover physical and psychosocial variables and justify this method.

Treatment tools- Cognitive behaviour, graded activities/exercise, graded exposure (in-vivo), education, changing beliefs and behaviours and how to accomplish, goal setting, self management techniques, alternative therapies which could be delivered by a multidisciplinary team, functional restoration, distraction techniques found in the literature, mirror treatment, any treatment you have learned on a clinical rotation

There may be other evaluation or treatment topics that are not listed above and you are invited to be innovative in your choice of topic as long as it meets the criteria set out for this course.

Once your group has discussed and identified a topic remember to confirm that it is acceptable with the instructor.

C. Case Presentation (oral) (20%)

- a. Each group will make a 15-minute presentation in class; there is no need for each of the 5 people to speak – the goal is to communicate effectively to the rest of the class.
- b. The emphasis of the presentation should be on the written assignment. The instructors will use a standard form to evaluate the presentation of each group at the time of its presentation.
- c. The presentation should use a case study approach to bring the abstract and technical information of the written assignment into a form that would be useful in the clinic. This might be an actual clinical case that someone has encountered, a case reported in the clinical literature, or a hypothetical case.
- d. Use the literature and clinical experience to describe the ‘story’ of a ‘typical patient’; including the impact of the condition on him or herself, their family etc, etc. Use evidence based information. In the story: a) describe the presenting situation, describe the evaluation method used to cover a complete evaluation and the tools used, why they were chosen and what they revealed. Discuss the difficulties encountered in evaluating chronic pain in a clinic setting as opposed to a rehab setting. or b) describe a case and then give a brief overview of what was found on evaluation and describe the particular treatment plan you chose to use from that evaluation for the patient. Identify what you think would work well and why and what else you would try and why. Discuss a clinic setting as opposed to a rehab setting.
- e. For either a) or b) What lessons did you learn and what impact will this knowledge have on you as a clinician?
- f. The PowerPoint used in the class presentation should be placed on the website as a study guide for the rest of the class. Thus, you should be selective and interpretive in your presentation and not flood the rest of your

colleagues with minutia that will prevent them from seeing and retaining the key messages related to your particular disease entity.

D. Peer Assessment (5%)

- a. Each student will be asked to evaluate the other groups in their oral presentation using a standard grid.

E. Final Exam (written) (45%)

- a. The final exam will be a 3-hour written exam that will cover the entire course.
- b. It will consist of 60 questions drawn from the lecture material (approximately 4 questions from each).
- c. The yet- to-be-determined date will be during exam week.
- d. The weighting of questions on the exam will follow the points emphasized in the lectures. These should guide the study time devoted to the reading materials and any self-directed efforts of the students. The questions will be about 50% multiple choice and 50% short answers.

F. Evaluation Criteria

1. Written report

The written group assignment is due on the date of the exam with a 5% penalty for each 24 hours overdue and a 2% penalty for each page over 20.

STRUCTURE AND REASONING	80%
Is it an evidence-based critical review of the literature on a specific evaluation plan or treatment option for chronic pain	
Is the bio-psychosocial model used as the context for the document?	
Is the quality of evidence supporting the proposed topic	
Is there an evidence-based rationale and where appropriate, references to recent literature?	
The paper presents key elements of the topic e.g. evaluation tools used for the evaluation method chosen/ treatment option chosen	
TECHNICAL AND PROFESSIONAL ASPECTS	15%
Writing style - Appropriate professional or technical language used	
Presence of APA style referencing	
Used Arial 10 pt or Times New Roman 12 pt font, 2-cm margins, double spacing,	
PEER EVALUATION	5%
Interesting presentation	
Clinical relevance	
Provided constructive information and demonstrated good ability to handle questions	
Evidence based presentation	
Organized thoughts	

2. Oral Presentation – Case History

Evaluation Matrix for the Case Presentation:

Group Project (20% of Mark)

Expected duration - 15 minute presentation

Evaluation Matrix – Factors to be evaluated and their weighting:

Relevant Literature (2)

Case presentation (4)

Problem

Impact of the problem

Treatment chosen or evaluation method (4)

What worked? **Or** why was this evaluation method complete?

Why?

How do you know?

What didn't work? **Or** why was the evaluation method incomplete (4)

Why?

What lessons were learned?

What impact will this have on you as a clinician?

i.e. what will you do (or think) as a result of this? (2)

Responses to questions (2)

Presentation Style (2)

Visuals

Voice

Total /

3. Peer evaluation of group members

Each team Please rate your colleagues on the following criteria using a scale of 1-5 Please hand in only 1 evaluation form for your team

You may submit the file by email to the instructor or by WebCT mail

Presentation # or title	Your team names				
Interesting presentation					
Clinical relevance					
Provided constructive information and were able to handle class questions.					
Evidence based presentation.					
Organization of thoughts					
TOTAL	/5	/5	/5	/5	/5

PHTH 623 DIFFERENTIAL DIAGNOSIS AND MANAGEMENT

Credits: 3

Prerequisites: Successful completion of all U3/qualifying year courses including Clinical Affiliation requirements

Instructors: Isabel Audette, Pht, FCAMT, MSc (Coordinator)
Frangiska Xenopoulos Pht, FCAMT, MSc (Sessional)
Heidi Clavet Pht, MSc (Sessional)
Claudia Brown, Pht (Guest Lecturer)

Access to the Instructor:

Isabel Audette
415-398-4511
isabel.audette@mcgill.ca

Course Objective: The course will focus on a case-based, client-centered approach following the SOAPIE format. The course will provide M1 students with the opportunity to build upon their previous musculoskeletal skills and to integrate evaluation and treatment approaches with client care experiences gained from their clinical rotations.

Course Structure: The course is made up of a combination of short lectures, group discussion and directed labs for five (5) hours a week over 13 weeks. The course emphasizes a gradual increase in student responsibility for course matter.

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

General Learning Outcomes: Building on previously learned orthopaedic knowledge, the student will be able to evaluate and treat clients of different ages with complex conditions affecting the musculoskeletal system.

Specific Learning Outcomes: 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. Pain with complex aetiology
 - i. central pain

- ii. facilitated segment neuropathy
- b. Complex musculoskeletal pathologies and associated symptoms
 - i. Temporomandibular joint dysfunctions
 - ii. Dizziness
 - iii. Headache
- c. More complex objective components of a physical therapy assessment
- d. Pelvic floor and related structures:
 - i. Describe the basic anatomy
 - ii. Describe the basic physiology of the urinary system and lower digestive tract.
 - iii. Discuss pelvic floor dysfunctions in relation to urinary, ano-rectal and sexual disorders.
 - iv. Demonstrate knowledge in the physiotherapy approach to pelvic floor dysfunction (evaluation, treatment and outcome measures).

2. Integrate the theoretical knowledge and practical skills described above in order to perform a physiotherapy assessment of clients with simple musculoskeletal conditions affecting the extremities and spine.

- a. Demonstrate effective, professional verbal and written communication skills in order to:
 - i. Interact with clients, care-givers and other health care professionals
 - ii. Conduct an appropriate, thorough and focused client interview, including:
 - 1. relevant past medical history
 - 2. relevant subjective information
 - 3. individual and environmental factors which may affect management

- iii. Document a client assessment and intervention using the SOAPIE format
 - iv. Document the findings of standardized outcome measures
 - b. Integrate subjective and objective findings in order to:
 - i. Develop a clinical impression.
 - ii. Assess the nature, severity and irritability of the condition.
 - iii. Appropriately identify, apply and interpret manual therapy techniques and special tests.
 - iv. Develop a problem list based on the WHO International Classification of Functioning, Disability and Health Model.
 - v. Determine a realistic prognosis.
 - c. Ensure a safe environment for client and therapist at all times.
 - i. Identify contraindications to manual therapy.
 - ii. Identify “red flags” which indicate the presence of serious pathology (and need for physician referral).

3. Integrate clinical reasoning skills in order to establish a physiotherapy diagnosis

- a. Analyse and synthesize the subjective and objective findings.
- b. Elaborate complex working hypotheses / differential diagnoses.
- c. Generate an evidence-informed physiotherapy diagnosis.
- d. Integrate the Hypothesis-Orientated Algorithm for Clinicians II (HOAC II) and the Rehabilitation Problem solving Form (RPS).

4. Elaborate a complex evidence-informed intervention plan related to the physiotherapy diagnosis.

- a. Create short and long-term client-centered goals
- b. Select appropriate outcome measures

- c. Educate client regarding his/her condition and its overall management
 - i. Promote active self-management
- d. Design the interventions based on the client's response and progress
- e. Justify referral of client to other services
- f. Judge when client discharge is appropriate

Required Text:

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*. 2nd ed. McGraw-Hill.

Student Evaluation:

Participation	(5%)
Spot check – 1 spot check	(3%)
Assignments	(2%)

Midterm Exam:

Case Hx Assignment	(15%)
Date TBA	
Practical exam (OSCE)	(15%)
Date TBA	

Final Exam:

Practical exam (OSCE)	(15%)
Date TBA	
Written exam	(50%)
Date TBA	

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. 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 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Dress Code: Professionalism with respect to dressing is encouraged throughout the course of the semester. It is each student's responsibility to have appropriate attire during all class assignments and learning activities.

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 10% of laboratory or small group sessions, without prior approval, will receive 0/10 for participation in the course. This rule applies to labs and to all required workshops, seminars or professional activities.

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course.

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. Late assignments will be accepted with a penalty of 5% for each day overdue.

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 398-6009 before you do this.

PHTH 573 PHYSICAL THERAPY CLINICAL PRACTICUM 3

Credits: 7

Prerequisites: Clinical Practicum 1 & 2, Differential Diagnosis and Management (PHTH-623), Advanced Research Methods (POTH-612), Integrated Pain Management (PHTH-622)

Instructors: Liliane Asseraf-Pasin
Faculty Lecturer & Academic Coordinator of Clinical Education (ACCE)
Office: Davis House D7
Office hours: TBA
liliane.asseraf.pasin@mcgill.ca

Isabel Audette
Faculty Lecturer & Assistant Academic Coordinator of Clinical Education (AACCE)
Office: Davis House D4
Office hours: TBA
isabel.audette@mcgill.ca

On-site Clinical Coordinators and Clinicians from McGill Affiliated Hospitals will also be involved.

Course Description: This 7-week course is the third in a series of four clinical practicum where the student will be able to evaluate and treat patients with musculoskeletal, cardiovascular and/or neurological conditions across the lifespan.

The course includes one mandatory seminar of two (2) hours.

Note Not attempting the seminar may delay subsequent practicum.

Course Structure: The clinical practicum courses are full-time, beginning in the summer term of M1 and continuing at set intervals during the program. The clinical practicum courses take place at the MUHC and other McGill affiliated facilities, such as other hospitals, CLSC, CHSLD, private clinics, rehabilitation centres, schools, and industries.

In addition to the Montreal region facilities a number of out-of-province and international affiliated sites are available upon request. The Physical Therapy Program has developed specific guidelines pertaining to out-of-province and

international practicum, which follow the guidelines of the National Academic Coordinators of Clinical Education in Physiotherapy (NACEP).

For out-of province and international placements travel and accommodation are the student's responsibility.

Instructional Method: Supervision is provided by a Physical Therapist to assist the transition of the novice student to an entry-level practitioner. Clinical educators are encouraged to use the 2:1 model of supervision to enhance clinical reasoning through reciprocal peer coaching. In conjunction with the on-site practicum experience, web-based technology tools are available to facilitate the student's learning. Clinical practicum experiences in different sites may vary according to the types of clients available.

Learning Outcomes: The student will be able to evaluate and treat patients with advanced musculoskeletal conditions, cardiovascular and/or neurological conditions. In this practicum learning objectives and expectations will be considered level 3*.

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

General Learning Outcomes:

1. Practice in a safe manner that minimizes risk to patient, self and others.
2. Demonstrate professional behaviour during interactions with others and adhere to ethical and legal practice standards.
3. Demonstrate effective interpersonal relations and communications with clients and their environment, physical therapists, and other members of the health care team.
4. Engage in various additional learning opportunities specific to a particular setting (teaching rounds, in-service, home visits, administrative committees).
5. Adapt the delivery of physical therapy care to reflect respect for and sensitivity to individual differences.
6. Demonstrate portfolio collection techniques.
7. Understands the roles of PT and other team members in this setting.

Specific Learning Outcomes: Students must obtain a **minimum of 6** on the CPI visual analogue for **criteria 6 to 24** and a **minimum of 9** for **criteria 1 to 5** (Flagged Items) of the CPI to pass the clinical rotation #3. The **Caseload** should be **Equivalent to 75% of PT at the end of this rotation.**

With *some supervision* of the supervisor, student must be able to:

1. Optimize use of time.
 - a. Organize schedule and manage time.
 - b. Set priorities.
 - c. Becoming increasingly self-directed.
2. Manage space, equipment and other resources to optimize clinical practice.
3. Integrate and apply theoretical knowledge of the basic and clinical sciences for neurological, orthopedic, pediatric and cardio-respiratory conditions.
4. Demonstrate the use of evidence-based practice to supplement and reinforce the material covered in the academic curriculum.
5. Perform subjective and objective assessment of new clients using the ICF model.
6. Demonstrate analytical and interpretive abilities for effective evaluation of the patient and planning of short and long-term client centered goals.
7. Use clinical reasoning skills to design and apply a physical therapy intervention that takes into consideration the needs of the patient and the discharge potential.
8. Generate more complex physiotherapy differential diagnosis and predict prognosis for simple cases.
9. Demonstrate student's ability to execute effective therapeutic procedures.
10. Document information obtained from a physical therapy assessment using the SOAPIE method of charting.

11. Be responsible for **75%** of patient load of a PT from admission to discharge and will:
 - a. Question and justify decisions made.
 - b. Make decisions regarding evaluations and treatment planning based on sound judgment and in consideration of all performance areas.
 - c. Attend meetings/rounds and discuss his/her cases.

Required Text:

1. *Principles for Moving Patients Safely*. ASSTSAS 1999. This text is required for workshop participation and a reference for all future clinical practica.
2. Code of Ethics. La Gazette Officielle du Québec, 1999.

Student Assignment and Evaluation:

Case Presentation: Students are expected to present a one-hour (1) evidence-based presentation to the clinical staff and students present in the clinical site. The presentation may be case-based or on a specific topic of interest approved by the clinical supervisor. (Appendix 1 – Presentation format).

Evaluation: The Clinical Performance Instrument (CPI) is based on 24 criteria. **Five performance dimensions are used to evaluate student's performance: these are 1) Quality of intervention; 2) Supervision/Guidance required; 3) Consistency of performance; 4) Complexity of tasks/environment; and 5) Efficiency.** The CPI incorporates knowledge, skills, attitudes and multiple sources of information such as self-assessment, presentations, and peer review to make decisions about readiness to practice. (Appendix 2 – CPI).

With each Clinical Practicum, the student is expected to improve his/her weaknesses and increase his/her confidence and competence to that expected of an Entry-Level Physical Therapist. By the end of the third Clinical Practicum, the student is expected to carry **75% of the patient load of an Entry-Level Physical Therapist.**

Although each clinical educator evaluates a student's performance, it is the ACCE who is responsible for determining acceptable levels of performance for each clinical experience and, who ultimately assigns the grade of PASS/FAIL.

Plagiarism/Academic Integrity: 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. For more information please refer to:
www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course. Student's CPI self-evaluation can be filled out in French or in English.

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 398-6009 before you do this.

POTH 602 EDUCATIONAL METHODOLOGY

Credits: 3

Prerequisites: Advanced Research Methods successfully completed.

Coordinator: Liliane Asseraf-Pasin
Office: Davis Room 7
Office hours: Please make appointments by email
(514) 398-5594
liliane.asseraf.pasin@mcgill.ca

Course Description: The specific structure of the course revolves around principles of course design and how they relate to knowledge transfer. This applied course focuses on the development, delivery and evaluation of a course or workshop. Student will develop a course and a workshop outline that can be targeted to clinicians, patients and caregivers or students. Student will be introduced to, or allowed to revisit strategies for implementation of research findings into the practice setting. A third component of this course will introduce or re-visit interprofessional education and practice (IPE & P), theoretical models, role, identity and professionalism.

Course Structure: This course will incorporate two sessions of 3 hours a week of lectures/ seminars and panel presentations for the first 5 weeks (intensive) and one session of 3 hours a week for 3 weeks (for a total of 39 hours). This course is offered in M1 winter term.

Purpose: The overall intent of this course is to provide a venue in which students can learn and apply the principles of effective course design, instructional and evaluative methods of a course by developing their own course (such as: a professional continuing education course or a specific patient education course). Furthermore, the entry level practitioner will be able to recognize and respond to his roles as a knowledge broker, a member of an interprofessional team, and as an educator to the population it serves.

Learning Outcomes: At the end of the course, the student should be able to:

1. Understand the principles of writing learning objectives that are clear, concise and appropriate for their course using Bloom's taxonomy.

2. Apply pedagogical principles to develop a course outline and to design and implement a workshop.
 - Develop a course plan and course outline with general and specific course objectives that could be implemented to a physiotherapy setting.
 - Conceptualize their ideas into a concept map which conveys their course content.
3. Compare and contrast the benefits of different models of course evaluation.
4. Understand the importance of their choice of application of instructional principles for teaching as well as the role of knowledge translation, and apply these principles to course design.
 - Present one lecture from their course using microteaching
5. Understand the benefits and challenges of interprofessional education (IPE) and interprofessional practice (IPP).

Course content by week: (subject to change)

Week 1:

- Presentation of Course Outline and Objectives & Course Evaluation Methods
- Identify Course Concepts
- Writing Learning Objectives
- Design Course Outline

Week 2:

- Examining the instructional strategies for physiotherapist versus patient audiences
- Designing methods of evaluation.
- Designing formative and summative student evaluation tools (assignments, role play, exams as course evaluation tools).

Week 3:

- Introduction to Micro-Teaching
- Concepts of Adult Education
- Concepts of Patient Education

Week 4:

- Microteaching presentations

Week 5:

- Planning successful workshops

Week 6:

- Knowledge Translation - What is a knowledge Broker

Week 7:

- Program evaluation

Week 8:

- Interprofessional Education and Interprofessional Practice-theoretical models, best practices

Week 9:

- Evaluation

An interprofessional education workshop on the topic of cultural awareness will take place during the term. As the scheduling of this workshop depends on the availability of several groups of students, the workshop may take place outside regular class-time. This content, nevertheless, is part of content for POTH 602. Details will be communicated on the first day of class.

Course Materials: A complementary WebCT environment allows for exchanging views, developing joint resources and the conceptual integration of assigned readings.

Student Assignment and Evaluation:

Course Objectives	5%
Concept Map and Course Outline	25%
Microteaching	20%
Workshop Design Assignment	35%
Quizzes based on readings	15%

(Knowledge Transfer, Adult Learning, IPE and Clinical Practice Guidelines)

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.

Plagiarism/Academic Integrity: 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. For more information please refer to:
www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Dress Code: Professionalism with respect to dressing is encouraged throughout the course of the semester.

Right to Submit in English or French written: 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, except in courses in which acquiring proficiency in a language is one of the objectives.

Consequences of Not Completing Assignments as Requested: An individual who does not complete a required assignment and who does not have a university-recognized reason for deferral of that assignment will receive a 0 for that portion of the course. Assignments submitted late will be graded but will receive a deduction of 2% per day, 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 Office for Students with Disabilities at 398-6009 before you do this.

PHTH 620 PHYSICAL THERAPY CLINICAL PRACTICUM 4

Credits: 7

Prerequisites: Clinical Practicum 3, Educational Methodology (POTH-602)

Instructors: Liliane Asseraf-Pasin
Faculty Lecturer & Academic Coordinator of Clinical
Education (ACCE)
Office: Davis House D7
Office hours: TBA
liliane.asseraf.pasin@mcgill.ca

Isabel Audette
Faculty Lecturer & Assistant Academic Coordinator of Clinical
Education (AACCE)
Office: Davis House D4
Office hours: TBA
isabel.audette@mcgill.ca

On-site Clinical Coordinators and Clinicians from McGill
Affiliated Hospitals will also be involved.

Course Description: This 8-week course is the last in a series of four clinical practicum where the student will be able to evaluate and treat patients with musculoskeletal, cardiovascular and/or neurological conditions across the lifespan.

The course includes one mandatory individual meeting of 15min with the ACCE or AACCE and one mandatory seminar of two (2) hours.

Course Structure: The clinical practicum courses are full-time, beginning in the summer term of M1 and continuing at set intervals during the program. The clinical practicum courses take place at the MUHC and other McGill affiliated facilities, such as other hospitals, CLSC, CHSLD, private clinics, rehabilitation centres, schools, and industries.

PHTH-620 is usually completed in the Fall of M2, in September – October. If the clinical placements PHTH-572 and PHTH-573 have been completed in the Winter of M1 and in the fall of M2 respectively, then the last clinical placement PHTH-620 must be completed in November – December of M2.

In addition to the Montreal region facilities a number of out-of-province and international affiliated sites are available upon request. The Physical Therapy Program has developed specific guidelines pertaining to out-of-province and international practicum, which follow the guidelines of the National Academic Coordinators of Clinical Education in Physiotherapy (NACEP). **For out-of province and international placements travel and accommodation are the student's responsibility.**

Instructional Method: Supervision is provided by a Physical Therapist to assist the transition of the novice student to an entry-level practitioner. Clinical educators are encouraged to use the 2:1 model of supervision to enhance clinical reasoning through reciprocal peer coaching. In conjunction with the on-site practicum experience, web-based technology tools are available to facilitate the student's learning. Clinical practicum experiences in different sites may vary according to the types of clients available.

Learning Outcomes: The student will be able to evaluate and treat patients with advanced musculoskeletal conditions, cardiovascular and/or neurological conditions. In this practicum learning objectives and expectations will be considered level 4.

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

General Learning Outcomes:

1. Practice in a safe manner that minimizes risk to patient, self and others.
2. Demonstrate professional behaviour during interactions with others and adhere to ethical and legal practice standards.
3. Demonstrate effective interpersonal relations and communications with clients and their environment, physical therapists, and other members of the health care team.
4. Engage in various additional learning opportunities specific to a particular setting (teaching rounds, in-service, home visits, administrative committees).
5. Adapt the delivery of physical therapy care to reflect respect for and sensitivity to individual differences.
6. Demonstrate portfolio collection techniques.

7. Understands the roles of PT and other team members in this setting.

Specific Learning Outcomes: Students must obtain a minimum of 8 on the CPI visual analogue for criteria 6 to 24 and a minimum of 9 for criteria 1 to 5 (Flagged Items) of the CPI to pass the clinical rotation #3. The **Caseload** should be **Equivalent to 90-100% of PT by the end of this rotation.**

With *minimum supervision* of the supervisor, student must be able to:

1. Optimize use of time.
 - a. Organize schedule and manage time.
 - b. Set priorities.
 - c. Becoming increasingly self-directed.
2. Manage space, equipment and other resources to optimize clinical practice.
3. Integrate and apply theoretical knowledge of the basic and clinical sciences for neurological, orthopedic, pediatric and cardio-respiratory conditions.
4. Demonstrate the use of evidence-based practice to supplement and reinforce the material covered in the academic curriculum.
5. Perform subjective and objective assessment of new clients using the ICF model.
6. Demonstrate analytical and interpretive abilities for effective evaluation of the patient and planning of short and long-term client centered goals.
7. Use clinical reasoning skills to design and apply a physical therapy intervention that takes into consideration the needs of the patient and the discharge potential.
8. Generate complex physiotherapy differential diagnosis and predict prognosis for simple cases.
9. Demonstrate student's ability to execute effective therapeutic procedures.

10. Document information obtained from a physical therapy assessment using the SOAPIE method of charting.
11. Be responsible for 90-100% of patient load of a PT from admission to discharge and will:
 - a. Question and justify decisions made.
 - b. Make decisions regarding evaluations and treatment planning based on sound judgment and in consideration of all performance areas.
 - c. Attend meetings/rounds and discuss his/her cases.

Note Compared to level 3, in clinical practicum #4 students have had one full semester with two professional complementary courses in the area of their choice, which includes, advanced pediatrics, fitness and injury management, cancer rehabilitation, perception and action, promoting healthy activity, and one educational methodology course, prior to their 4th placements.

Required Text:

1. *Principles for Moving Patients Safely*. ASSTSAS 1999.

This text is required for workshop participation and a reference for all future clinical practica.

2. Code of Ethics. La Gazette Officielle du Québec, 1999.

Student Assignment and Evaluation:

Case Presentation: Students are expected to present a one-hour (1) evidence-based presentation to the clinical staff and students present in the clinical site. The presentation may be case-based or on a specific topic of interest approved by the clinical supervisor. (Appendix 1 – Presentation format)

Evaluation: The Clinical Performance Instrument (CPI) is based on 24 criteria. **Five performance dimensions are used to evaluate student's performance: these are 1) Quality of intervention; 2) Supervision/Guidance required; 3) Consistency of performance; 4) Complexity of tasks/environment; and 5) Efficiency.** The CPI incorporates knowledge, skills, attitudes and multiple sources

of information such as self-assessment, presentations, and peer review to make decisions about readiness to practice. (Appendix 2 – CPI)

With each Clinical Practicum, the student is expected to improve his/her weaknesses and increase his/her confidence and competence to that expected of an Entry-Level Physical Therapist. By the end of the fourth Clinical Practicum, the student is expected to carry **90-100 % of the patient load of an Entry-Level Physical Therapist.**

Although each clinical educator evaluates a student's performance, it is the ACCE who is responsible for determining acceptable levels of performance for each clinical experience and, who ultimately assigns the grade of PASS/FAIL.

Plagiarism/Academic Integrity: 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course. Student's CPI self-evaluation can be filled out in French or in English.

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 398-6009 before you do this.

POTH 624 MASTER'S PROJECT

Credits: 6

Coordinators: Patricia McKinley PhD & Barbara Mazer PhD

Team Projects (4-5 students per project) will be supervised by a Faculty Supervisor and a Clinical Supervisor. Teams will work on their projects part-time throughout the school year (September- April) and then full-time over the summer months (May-August).

Time Frame: Fall M1– Summer M2
(Final grade will be submitted in Fall M2).

Structure:

General course requirements: Seminars or meetings will be given by the course coordinators throughout the calendar year September – August. The content of these seminars, according to need, may include the following:

- U3/QY April: information session meeting for project execution.
- M1 September: an orientation to the course, including guidelines for submission to a Research Ethics Committee, project development and requirements for obtaining a passing grade.
- M1 Fall within POTH 612: a 3 wk 3 hr/week block on development of a protocol for the project, will specifically target methodology related to protocol development.
- M1 Winter midterm: trouble shooting seminar and progress report, completing submission for ethics and scientific committees where necessary.
- M2 July: meeting for organizing project completion and power point presentations to supervisors and clinicians.

Specific course requirements: Each team will be required to meet with the Supervisor(s) as follows for a minimum of 6-8 meetings, 1-2 hours per meeting:

- Development of an action plan and student letter of agreement (September M1).

- Project progress report (December, M1).
- Project progress report (March-April, M1).
- Team meetings during data collection period as necessary, approximately once per month (May- mid-July).
- Final Paper due (end of August M2).
- Individual discussion (end of August, M2).
- Oral presentation (last week of August M2).

Purpose and Objective: The purpose of this Masters project is to conduct a scholarly piece of work that yields information related to rehabilitation that can be presented at a conference and/or is publishable. The specific goal for the student is to develop research knowledge and skills that are clinically relevant.

Upon completion of this course, the student will be able to:

1. Design a research question that is pertinent to rehabilitation or the development of a clinical program.
2. Conceptualize a project that is pertinent to rehabilitation.
3. Conduct a research study that yields information related to rehabilitation and can be presented at national or international conferences and/or is suitable for publication in a clinically related journal.

Examples of Project Categories:

1. **Survey:** Plan and conduct a survey of students, patients, informal caregivers, health professionals and others on a topic related to rehabilitation.
2. **Qualitative Study:** a proposal that would include rationale, literature review and methods for qualitative research of a question relevant to rehabilitation that may include collection and/or analysis of data in a limited scope (preliminary focus groups etc).
3. **Clinical Practice Guidelines (CPG)** Take existing clinical guidelines or a critical care map for a specific condition and review and update supporting evidence in a formal written recommendation for practice that includes a full and documented rationale.

4. **Program Evaluation:** In collaboration with a clinical department, plan an evaluation of a specific program that might include development of a survey, analysis of pre-existing data sets, development of data sets, review of the literature, case studies or preliminary data.
5. **Systematic Review:** Systematically examine the research related to a specific clinical question using a defined protocol and criteria for evaluation, review the evidence on a topic and prepare your findings for publication and presentation.
6. **Knowledge Translation:** Develop a website or CD module related to rehabilitation for use by patients, caregivers, teachers or health professionals. Develop a teaching aid for patients, caregivers, or health professionals.
7. **Measurement Development:** Develop a proposal for a research project that includes rationale, literature review and methodology to evaluate the psychometric properties of a measure or tool used in the practice of physical or occupational therapy. May include a small pilot study requiring a limited amount of data collection and/or data analysis.
8. **Quantitative Study:** Development and implementation of research methodology and collection and analysis of data to answer a specific research question.

Required Text: None

Evaluation: A written and oral component will be expected with the written component worth 70% and the oral component worth 30%.

Written component: The write-up of the project should be in the form of an article or report and should be approximately 20-30 pages plus appendices (see page 9 for the breakdown of marks). In addition, each student will have to complete a written independent portion of the project - the specific nature of this component will be decided by each team. It may be that each student writes an independent discussion, each student can answer a specific question related to the project, etc. Each one will be graded separately and will be worth 20% of the final written grade. **Each student is required to successfully pass this individual component in order to pass the course.**

Oral component: Each group will be required to present their project at the clinical site associated with their project. This will be a formal 40-45 minute Powerpoint presentation for the Faculty Supervisor, the Clinical Supervisor as well as other interested clinicians at the site where the project was initiated. This 40-45 minute presentation will be graded (see page 10 for the marking grid). In addition, all groups will present their project for the McGill faculty and students – this will be a short 7 minute presentation at the end of August.

Both the written and oral presentations must be completed and submitted before the end of August to ensure that all work is completed prior to beginning the M2 stage. The grades though, will be credited in the Fall term of M2. The total grade will be available early in the term, so that if a student falls below a passing mark (65%), he/she will have an opportunity to rewrite their independent part before the end of the term. The final mark will be submitted as a Pass or Fail.

To successfully pass the course, the final project must include at least 10 of the 33 components in the evaluation grid (see page 6) and the final total grade must be higher than 65%. As well, the following elements are required:

- Attendance and participation at group meeting.
- Summary reports of the group meetings.
- Attendance at seminar meetings for POTH 624.

Project Selection Process: There will be a list of projects available for selection by each student by the end of June, M1. Each student will sign up for projects in order of preference (1st, 2nd, 3rd and 4th). Before the start of the fall semester, the project teams will be announced.

Note Students must select a project that is identified as being within their discipline (PT or OT) or interdisciplinary. Faculty and Clinicians will identify how many OT and PT students are required for each project.

The projects will be selected from a list of research topics put forth by clinicians and faculty each year, and the final selection will be determined by the breadth and diversity of the projects as well as the balance for Occupational and Physical Therapy students. This list of projects will be developed during clinical workshops and meetings held for clinicians during the winter term.

The Advisory Committee: Students will develop their group projects under the direction of their Project Advisory Committee and the coordinator of the POTH 624 course. The committee will be made up of a Supervisor from the Faculty of Physical and Occupational Therapy, and a clinical expert/consultant.

Specific Duties:

Faculty Supervisor: The Faculty Supervisor provides advice and assistance in the refinement of the research question (with the Clinical Supervisor) that will be developed by the student group into a research project. The Supervisor is responsible for the following:

- Ensuring necessary procedures with respect to permission, Research Ethics, institutional and academic requirements are met.
- Reading and commenting on progressive documents of the project.
- Assisting with arrangements for the Research Committee meetings.
- Attending the Research Committee meetings and the final research day presentation.
- Assisting with grading of the project.
- Liaising with any outside consultants or agencies required for completion of the project.

Note where the primary Faculty Supervisor is a faculty research associate or a faculty lecturer, the expert Faculty professor appointed to the project will only be responsible for:

- Providing expertise in the research domain.
- Attending 4 research committee meetings and the final research day presentation.
- Reading and commenting on final protocol.
- Assisting with grading of the project.

Clinical Supervisor: A health care professional (Physical Therapist, Occupational Therapist, Physician, etc) in rehabilitation or other area of service delivery, may be appointed as a clinical expert/consultant to assist in the development and completion of the project. The Clinical Supervisor will serve as a supervisor and

will contribute to the evaluation of the completed project. This role will include reading and commenting on progressive documents of the project, attending the appropriate research meetings and the final research day presentation.

Timeline:

August- September M1

- Project organization.
- POTH 612 and selection of methodology blocks.
- Meeting 1 with Advisory Committee.

September M1-April M1

- Initial work on research projects (e.g. literature review, etc).
- November-December M1
- Meeting 2 with Advisory Committee.
- Organize paper work for scientific review and ethics (where necessary).
- Final marks for POTH 612.

January or February

- Meeting or contact with supervisor to evaluate progress and target goals for winter semester and finish Ethics forms if necessary.

March-April

- Meeting with Advisory Committee to finalize plan for data collection.
- Progress report sent to POTH 624 coordinators.
- Present project to Ethics where necessary and make corrections as required.

May – June M2

- Conduct the project/ Data collection.

July

- Meeting with Advisory Committee to present and discuss results.

August

- Completing the write-up of the project including the individual discussions.
- Creating the Powerpoint presentation/Poster presentation.
- Evaluation of projects- oral presentation and written report.

Guidelines for Time Commitment for Working on the Project and For

Summer Vacation: All students must plan to be available to work on their project approximately 35-40 hours per week with at least 25 hours available during weekday daytime hours (Monday-Friday 8-5) in order to work together with their team supervisors, and to complete the tasks that must be done during the work day

(meeting with staff, doing data collection, etc). Groups are responsible for ensuring that they have sufficient common available time to schedule meetings, work collaboratively and conduct the data analysis.

Each student is entitled to take 2 weeks of vacation over the 4 months of summer (May-August). The timing of this vacation must be approved by the Faculty Supervisor, as well as the other students in the group to ensure that their absence will not affect the progress of the project.

LEARNING OBJECTIVES / EVALUATION CRITERIA

The Professional Masters projects must meet a minimum of **10** of the **33** learning objectives listed. No objectives are “compulsory”, allowing for a broad range of projects that can meet the criteria.

As a group, select the objectives that will be covered by the group project.

INTRODUCTION / BACKGROUND	
Formulate a research question / program objective	
Conduct a literature search	
Critically review the literature (the breadth and depth should be appropriate to the type of project)	
Develop background information supporting the research question / program	
Present/ apply a theoretical model of the relationships under study	
Conduct a systematic literature review	
METHODOLOGY/ DATA COLLECTION	
Choose measures to answer the question / evaluate clinical program	
Develop a measure	
Develop or refine a questionnaire	
Test the measurement properties of a measure or questionnaire	
Write a consent form/prepare documents for ethics committee	
Develop clinical program plan	
Develop promotional or educational material for clinical program	
Implement clinical program	
Evaluate clinical program	
Recruit subjects into a research study	

Collect data from subjects through interviews / physical tests / focus groups	
Manage and co-ordinate study	
Choose a design to answer the question	
Create a computerized method of managing the data (database design)	
Enter data into a computerized data base	
Verify accuracy and completeness of data	
RESULTS AND ANALYSIS	
Manipulate data to create new variables	
Calculate descriptive statistics	
Perform basic inferential statistics (e.g. linear regression or logistic regression, analysis of variance, t-tests, Chi-square tests, etc.)	
Use complex statistical models (e.g. hierarchical linear models, Poisson models, ordinal regression, categorical regression, survival analysis, Cox proportional models, Markov models etc.)	
Perform basic qualitative analyses (e.g. categorizing and contextualizing, reflexivity, transparency, constant comparison, etc.)	
Perform complex qualitative analyses (e.g. ethnography, poetry, art-based analyses, etc.)	
PRESENTATION OF RESULTS AND CONCLUSION	
Interpret results from statistical or qualitative analyses / systematic literature review	
Create tables to present results	
Create graphs of results	
Create powerpoint presentation for conference or clinical rounds	
Write article for journal publication	

Faculty Supervisor Signature_____

Date_____

Clinical Supervisor Signature_____

Date_____

Student Signature _____

Date_____

Developed by Nancy E. Mayo, PhD November 7, 2003.

Modified with permission by Graduate Faculty Committee with contributions by Dr. L. Butler-Kisbert and Michèle Hébert October 2005.

Progress Tracking Form

PROJECT TITLE: _____

STUDENTS: _____

FACULTY SUPERVISOR: _____

CLINICAL SUPERVISOR: _____

LEARNING OBJECTIVE (page 6-7)	PERSON(S) RESPONSIBLE	EXPECTED DATE OF COMPLETION	DATE COMPLETED	SUPERVISOR SIGNATURE	STUDENT SIGNATURE
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10					
11.					
12.					

McGill University

School of Physical and Occupational Therapy

PROFESSIONAL MASTERS PROJECT EVALUATION

Written Presentation (70%) ***

- Introduction (research question, rationale) /5
- Background and literature review /15
- Methodology /10
- Results /15
- Discussion (individual discussion written by each team member) /20***
- General presentation (quality of language, organization of text) /5

TOTAL: /70

NB.

***Weighting may be changed depending on type of study except for **discussion/or other independent aspect** which is **FIXED at 20%**.

Oral Presentation – (30%)

Visual presentation

- Appropriateness of material (tables, figures, etc.) /4
- Quality of language /3
- Organisation of information and overall appearance /3

Oral presentation

- Selection of important components of project /5
- Demonstration of knowledge /5
- Clarity of presentation /5
- Capacity to answer questions /5

TOTAL: /30

POTH 624

POSTER OR ORAL EVALUATION

Presentation Title: _____

Presenter(s): _____

Evaluator: _____ Date: _____

Grade (/30) _____

Visual Presentation:

Appropriateness Of Materials	
<p>The tables and figures chosen for the presentation were related to the key points of the project.</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

Quality of Language	
<p>The terminology used was appropriate for the project and the terms were explained clearly. The grammar was correct and the punctuation appropriate.</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

Organization and Overall Appearance	
<p>There was an appropriate amount of information on the slides, and the text was readable. The organization was easy to follow and made sense.</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

Oral Presentation:

Selection of Important Components of Project	
<p>The chosen elements best represent the overall goals and outcomes of the project.</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

Demonstration of Knowledge	
<p>The scholarly/scientific rigor including: hypotheses, relevant literature, design, strategies for analysis, critical appraisal, discussion and conclusion was:</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

Clarity of Presentation	
<p>The oral or poster presentation: organization, appropriate use of professional language, logical flow, correct grammar and spelling, good pace, was:</p> <p>Excellent []</p> <p>Good []</p> <p>Adequate []</p> <p>Inadequate []</p>	<p>Comments:</p>

Response to Questions	
<p>Responses to audience/evaluator questions: clarity, relevance and appropriateness of explanations; ability to defend work; knowledge of strengths and limitations of study, were:</p> <p>Excellent []</p> <p>Good []</p> <p>Adequate []</p> <p>Inadequate []</p>	<p>Comments:</p>

POTH 624

WRITTEN EVALUATION GRID

Instructions to Evaluators:

Consider the six domains of evaluation. Categories and their relative weight may be adapted as appropriate to the specific project. Comments/feedback may be added to supplement the ratings.

Project Title: _____

Students' names: _____

Evaluators: _____ Date: _____

Grade (/70) _____

Research Question and Project Rationale: Weight (%) _____ Grade: _____ _____	
The topic was appropriately introduced and the question clearly stated; the rationale was provided to support the research question. Excellent [] Good [] Adequate [] Inadequate []	Comments:

Background and Literature Review: Weight (%) _____ Grade: _____ _____	
The breadth, depth and critical appraisal of the review of the literature were appropriate.	Comments:

Excellent []	
Good []	
Adequate []	
Inadequate []	

Methodology:	Weight (%) _____	Grade: _____
<ul style="list-style-type: none"> • Design, methods and statistical or qualitative analysis were appropriate for the study and appropriately executed; • For systematic reviews; search strategies and inclusion criteria were appropriate; • If education or intervention program; design and evaluation of effectiveness were appropriately outlined/conducted. <p>Excellent []</p> <p>Good []</p> <p>Adequate []</p> <p>Inadequate []</p>	Comments:	

Results:	Weight (%) _____	Grade: _____
<p>Results were presented in an organized and cogent manner. Appropriate tables and figures were included. Statistical analyses were appropriately reported and illustrated.</p> <p>Excellent []</p> <p>Good []</p> <p>Adequate []</p> <p>Inadequate []</p>	Comments:	

Discussion / Individual Component: Weight _____ Grade: _____	
<p>Student discussed findings, conclusions, interpretation, significance and/or future directions of the project by placing them into the context of existing literature, and outlining the significance for clinical practice and for future studies.</p> <p>The student showed innovative and independent thought and demonstrated mastery of the project.</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

General Presentation: Weight (%) _____ Grade: _____	
<p>The quality of the language demonstrated good grammar, appropriate use of professional language; text was well organized and the ideas flowed in a logical manner; figures, graphs and tables were easy to understand and legends were clear; manuscript was free of typographical errors.</p> <p>Excellent [] Good [] Adequate [] Inadequate []</p>	<p>Comments:</p>

General Comments:

Date: _____ Evaluator's signature _____

Guidelines for Written Presentation

TITLE PAGE-STANDARD FORMAT

{Title of Project Report}

By

{Students' names}

A project submitted to the School of Physical and Occupational Therapy in conformity
with the requirements for the degree of Master of Science in Physical or Occupational
Therapy

McGill University

Montréal, Québec Canada

{Month of final submission, year}

TABLE OF CONTENTS – STANDARD FORMAT

(can be modified as appropriate)

Table of Contents

Abstract (maximum 250 words or as specified by the journal selected for submission)

Acknowledgements (if desired)

List of Tables

List of Figures

1. Introduction / background information, purpose
 - 1.1 (Subsections as needed)
 - 1.2
2. Methods
 - 2.1 Design
 - 2.2 Subjects
 - 2.3 Equipment
 - 2.4 Outcome Measures
 - 2.5 Procedures
 - 2.6 Data Management/ Analysis
3. Results
 - 3.1 (subsections as needed)
 - 3.2
4. Discussion
 - 4.1 (subsections as needed)
5. Summary and Conclusions
6. References
7. Appendices

If your project required Ethics Approval and used a consent form, the consent form should be included in the Appendices.

McGill University
School of Physical and Occupational Therapy
PROFESSIONAL MASTERS RESEARCH ADVISORY COMMITTEE

Guidelines

Each team of students will be supervised by an Advisory Committee formed by:

- Faculty Supervisor (School of P&OT tenure-track or tenure professors)
- Clinical Supervisor

The responsibilities of the Advisory Committee are:

1. Provide advice to the team on different aspects of the research project
2. Meet with the students to assess progress on the project and complete progress report
3. Participate in the evaluation process

Note Membership of an Advisory Committee does not automatically imply an entitlement to authorship on any publication based on the team's research. The School's and Faculty of Medicine's Guidelines on Authorship must be followed.

Advisory Committee

Faculty Supervisor

Name: _____ E-mail: _____

Telephone: _____ FAX: _____

Clinical Supervisor

Name: _____ E-mail: _____

Telephone: _____ FAX: _____

Affiliation: _____

Students

Name: _____ Signature: _____ Date: _____

McGill University
School of Physical and Occupational Therapy
PROFESSIONAL MASTERS RESEARCH ADVISORY COMMITTEE

SUPERVISOR
LETTER OF AGREEMENT

I, _____ have agreed to be the

Faculty Supervisor or Clinical Supervisor

for the supervision of the research project to be executed by the team formed by:

Student name: _____ Student name: _____

Student name: _____ Student name: _____

Student name: _____ Student name: _____

My responsibilities include:

1. Provide advice to the team on different aspects of the research project.
2. Meet with the students to assess progress on the project and complete progress report.
3. Participate in the evaluation process.

In addition, I will provide:

- Laboratory space and access to equipment
- Work space (i.e., desk, computer, etc.)
- Access to subjects/clients as required
- Consultation as needed
- Pertinent reading material

Please specify:

M1 Fall # meetings: _____ or total # hours: _____

M1 Winter # meetings: _____ or total # hours: _____

M2 Spring/Summer # meetings: _____ or total # hours: _____

M2 Fall # meetings: _____ or total # hours: _____

Other (please specify): _____

It is my understanding that the team of students will:

A. Submit work to me for approval in the form of:

- Research proposal
- Data reduction
- Data analysis
- Draft of paper
- Material for oral presentation
- Other (please specify): _____

B. Acknowledge my contribution to their work in accordance with McGill Ethics Guidelines by:

- Acknowledging my contribution in oral and written presentations emanating from the project
- Including me as an author on relevant oral and written publication emanating from the project
- Other (please specify): _____

Signatures

Member of Advisory Committee: _____ Date: _____

Student representative for the team:

Name: _____ Signature: _____ Date: _____

McGill University

School of Physical and Occupational Therapy

PROFESSIONAL MASTERS RESEARCH ADVISORY COMMITTEE

STUDENT

LETTER OF AGREEMENT

I, _____ have agreed to be part of the project team entitled:

Which includes other team members as follows:

In addition to the general course requirements which include attending group meetings with the Supervisory Committee, contributing to interim reports, and writing an independent discussion for the paper,

I agree that my duties and responsibilities include the following:

Student signature: _____ Date: _____

PHTH 641 TOPICS IN CARDIORESPIRATORY REHABILITATION

Credits: 3

Instructor: Jadranka Spahija PT PhD
Office: Hosmer 300
Office hours by appointment
McGill: (514) 398-4922
Lab – Hôpital Sacré-Cœur de Montreal: (514) 338-2222 x 3654
jadranka.spahija@mcgill.ca

Guest lecturers: To be announced

Time of Lectures: Fridays 8:30-11:30 am

Prerequisites: PHTH552 Cardiorespiratory Rehabilitation

Course Structure: This course consists of one three (3) hour class per week over a 13 week semester, comprising lecture, seminar or on-site seminar.

Course Description: Exploration of new research concepts related to cardiorespiratory rehabilitation outcome measures and treatment techniques used in the management of patients with various medical, surgical, neurological and cardiorespiratory conditions.

This three-credit course, open to Physical Therapy students in the MSc (Applied) in PT and MSc. (Rehab.Sc.) programs, will build on previous theoretical and practical knowledge with enhanced emphasis on clinical reasoning and appraisal skills of current clinical practice in cardiorespiratory rehabilitation.

Online Course Evaluations: Students are strongly encouraged to complete the online course evaluations at the end of the term. Data obtained from these evaluations are used to provide instructors with feedback as well as for identifying situations where a course or instructor needs assistance. The feedback and suggestions contained in the responses are highly valued and helpful in ensuring that instructors make appropriate changes to courses as needed in order to facilitate student learning.

Learning Outcomes: On completion of this course, the students will be able to:

1. Explain the principles and procedures of respiratory muscle strength and endurance testing as well as training in patients with medical, surgical,

- neurological and cardiorespiratory disorders using knowledge of evidence-based practice.
2. Select appropriate cardiorespiratory outcome measures that can be used to assess patients with acute and chronic medical and surgical disorders both from a clinical and research perspective and to describe the reliability and validity of such measures.
 3. Evaluate the use of various techniques and mechanical devices for the purpose of secretion clearance in patients with various conditions based on recent research findings.
 4. Discuss current approaches for the physiotherapy treatment/management of specific conditions seen in the critical care unit.
 5. Evaluate the use of specific adjunct therapies used during exercise training in pulmonary rehabilitation programs.
 6. Develop cardiopulmonary rehabilitation programs for patients with various complex conditions.
 7. Apply skills in literature searching, information retrieval, and critical appraisal to (i) update knowledge of clinical conditions/procedures and (ii) evaluate the effectiveness of physiotherapy treatment techniques.

Course Content: List of topics to be covered

1. Cardiorespiratory outcome measures:

- Baseline and activity related dyspnea
- Respiratory and cardiac disease specific health-related quality of life measures.
- Functional and physical activity measures
- Secretion clearance: cough, sputum volume/weight, pulmonary function measures, exacerbations
- Direct and indirect measurement of chest wall motion and diaphragm excursion: respiratory inductance plethysmography, fluoroscopy, ultrasound, optoelectronic plethysmography
- Breathing pattern and dynamic end-expiratory lung volume assessment: pneumotachograph

- Respiratory mechanics: transdiaphragmatic, abdominal and intrathoracic pressures.
- Maximum inspiratory and expiratory mouth pressures, assessment of respiratory muscle endurance, magnetic stimulation of the respiratory muscles
- Electromyography of the respiratory muscles

2. Advanced topics in acute cardiopulmonary physiotherapy

- Manual hyperinflation, suctioning
- Positioning
- Early mobilization, limb exercises
- Novel modes of mechanical ventilation, patient-ventilator interaction

3. Cardiopulmonary rehabilitation

- Inspiratory muscle training in patients with COPD, neurological (spinal cord injury, ALS, MS) and cardiac conditions.
- Adjunct modalities for exercise training: supplemental oxygen, bronchodilators, heliox, non-invasive mechanical ventilation.
- Aging: exercise responses and modification of the training program
- Complex conditions: advanced COPD, pulmonary fibrosis, cancer, osteoporosis.

Instructional Methods:

- Lecture: didactic lecture with power point presentations uploaded on WebCT
- Seminars: case-based learning for refinement of clinical reasoning and problem-solving skills.
- and hands-on practical sessions at various research/clinical venues.

Course Materials: Assigned readings will be posted on WebCT and/or placed on reserve in the McIntyre medical library. Students are expected to have read the assigned readings prior to class and to be prepared to participate in class discussions.

Student Assignment and Evaluation:

- Written assignment: 30% (individual written 5-6 page critical review of an assigned pulmonary physiotherapy technique)

- Case presentation: 15% (small group written assignment related to a case-based context)
- Oral presentation: 15% (small group oral presentation of a specific cardiorespiratory outcome measure)
- Written exam: 35% (Individual evaluation implemented during the final exam period)
- Participation in class/CRW: 5% (individual evaluation based on preparation of readings, class discussion and participation at on-site visits)

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 3.6 Examinations, of the 2011-2012 [McGill University Health Sciences Calendar](#) for information on University regulations regarding final examinations and supplementals.

Plagiarism/Academic Integrity: 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Dress Code: Professionalism with respect to dressing is encouraged throughout the course of the semester in class and during site visits.

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course. Student's CPI self-evaluation can be filled out in French or in English.

Consequences of Not Completing Assignments as Requested: An individual who does not complete a required assignment and who does not have a university-recognized reason for deferral of that assignment will receive a 0 for that portion of the course. Assignments submitted late will be graded but will receive a deduction of 2% per day, 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 Office for Students with Disabilities at 398-6009 before you do this.

PHTH 661 SPORT PHYSIOTHERAPY

Credits: 3

Prerequisites: Successful completion of PHTH 623 Differential DX and Management.

Instructor: Isabelle Pearson PT, MSc, Cert. Sport PT
Office: Hosmer 201
514-398-4400, ext. 09214
isabelle.pearson@mcgill.ca

Course Description: This three-credit lecture/CRW/laboratory course is designed for physical therapy master's students as part of the professional complementary course. The students will learn effective assessment and treatment techniques for the management of athletes as part of a multidisciplinary approach.

Course Learning Outcomes: The student will be able to:

1. Explain the role of a multidisciplinary approach for the overall management of healthy and injured recreational or elite athlete.
 - a. Identify the roles and issues of the sport therapist within the sports medicine team.
 - b. Describe the roles of the other members of the sport medicine team.
2. Understand training principles and sport-specific demands.
 - a. Understand the basic principles of periodization of training.
 - b. Contrast the basic principles and demands of aerobic, anaerobic, strength, power and flexibility training.
 - c. Explain the biomechanics of different sports and identify potential sport-specific injuries.
 - d. Recognize and prevent situations that can result in acute or chronic injuries during the activity/sport.
 - e. Recognize and prevent athletic burnout and overtraining.
3. Evaluate and manage injured athletes of all ages and sports.
 - a. Explain the common pathologies encountered by the sport therapist.
 - b. Perform emergency care procedures and on-field assessments and interventions.

- c. Evaluate injured athletes with a wide range of acute and chronic sporting conditions.
- d. Develop care plans based on the assessment findings, knowledge of anatomy, biomechanics, phases of healing and sport-specific demands.
- e. Execute sport-specific interventions according to the plan of care and prevent further injuries.
- f. Monitor effectiveness of care and readiness to return to play.
- g. Understand the psychological factors impacting on injury and injury rehabilitation.
- h. Identify when referral or consultation with other professional(s) is necessary for proper management of the athletes.

Course Content: Topics include: sport medicine team approach, training principles, biomechanics of sports, injury prevention, protective equipment, emergency action plan, on-field emergency care, taping, splinting, sporting conditions and their management, return to play, nutrition, sport massage and sport psychology.

Instructional Methods: Lecture, case/problem-base approach, small group discussion and clinical skills labs will all be used to a varying degree while emphasizing evidence-based practice and a multidisciplinary approach in the overall management of the athletes. The course comprises of 7 hours per week for 8 weeks (subject to change).

Course Materials: To be determined.

Student Assignment and Evaluation: To be determined.

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 appropriate sections in the graduate calendar 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.

Plagiarism/Academic Integrity: 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. For more information please refer to:
www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

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

Attendance: Students who have missed more than 10% 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.

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course.

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 398-6009 before you do this.

POTH 636 ADVANCED PEDIATRICS IN PHYSICAL THERAPY

Credits: 3 credits

Prerequisites: For the students entering the first year of the M.Sc. (A) PT program, successful completion of all Qualifying year /U3 courses. The maximum number of students permitted to take this course is set at 20.

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 Hospital and Rehabilitation Centers in Montreal

General Course Description: This three-credit course reviews the principles of pediatric habilitation and rehabilitation pertinent to the practice of physical therapy. 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.

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 clinics.

Learning Objectives: Following attendance and active participation in class, the student will be able to:

1. Explain the essential pathophysiology and basis for common and 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. Demonstrate skill and competence in the assessment of pediatric patients with common neurological, orthopedic or cardio-vascular disorders, including the selection of assessment tools based on sound knowledge of psychometric properties of measures.
5. Develop a suitable evidence-based treatment plan for children with various conditions.
6. Integrate basic neuroscience, musculo-skeletal concepts and kinesiology principles to construct and organize developmentally appropriate physical rehabilitation activities for children of varying ages.
7. Demonstrate skill and competence in the treatment of children with various pediatric conditions, modify and progress treatment based on environmental, social, psychological and medical factors.
8. Appraise the relevance and importance of the International Classification of Functioning (ICF) in pediatric rehabilitation as well as demonstrate skill in using the ICF to frame evaluation, analysis and goal setting for children with various conditions.
9. Develop problem-solving skills to prepare for a clinical rotation in pediatric rehabilitation
10. Apply effective oral and written skills in case presentation and problem solving.
11. Understand issues related to health care and society related to children with various conditions.

Physiotherapy Roles and Competencies: This course aims to develop or improve the following roles and essential physiotherapy competencies, in relation to the learning objectives cited above:

Following attendance and active participation in class, the student will be able to:

Expert

1. Consult 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
2. Collect assessment data relevant to the child's and family's needs and pediatric physiotherapy practice.
3. Analyze assessment findings.
4. Establish a physiotherapy diagnosis and prognosis for children presenting with various conditions.

5. Develop and recommend an intervention strategy that is developmentally appropriate for children of varying ages.
6. Demonstrate how to implement intervention with children of varying ages, including teaching home exercises to be done by children or their parents during their interactions in clinical settings throughout the course.
7. Demonstrate how to evaluate the effectiveness of interventions and progress activities accordingly during their interactions in clinical settings throughout the course.

Communicator

1. Communicate effectively with children and families during their interactions in clinical settings throughout the course.
2. 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

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

Advocate

1. Begin to 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

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

Professional

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

Instructional Methods:

- Lecture: didactic lecture with assigned readings and power point presentations available through WebCT.

- 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

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 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, brain tumors, 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* (4th ed) Elsevier Science pub (**in bookstore**)

Readings posted on WebCT weekly

Student Assignment and Evaluation:

Participation, professionalism (individual)	5%
<i>Criteria for evaluation will be provided in the introductory lecture</i>	
Reflective journals	5%
<i>Criteria for evaluation will be provided in the introductory lecture</i>	
Prerequisite knowledge quizzes (individual)	10%

Four different quizzes administered prior to covering new material in each of the following 4 areas: development, neurological conditions, orthopedic conditions, cardio-respiratory conditions

Readings quizzes (individual)	15%
<i>Six quizzes provided through webCT covering content of assigned readings</i>	
Assessment tool presentation (group)	10%
Treatment activity catalogue (individual)	25%
Evidence-based group project	Written assignment (group) 20%
	Written discussion question (individual) 5%
	Oral Presentation 5%

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 3.6 Examinations, of the 2011-2012 [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.

Academic Integrity statement [approved by Senate on 29 January 2003]: 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Dress Code: Students are expected to demonstrate professional behaviour 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 all 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 Office for Students with Disabilities at 398-6009 before you do this.

POTH 637 CANCER REHABILITATION

- Credits:** 3
- Prerequisites:** Successful completion of all U3/Qualifying year courses and at least one clinical placement
- Instructor:** Ana Maria Rodrigues, PT, PhD candidate (Course coordinator)
- Guest lecturers:** Mary-Ann Dalzell, PT, MSc, Adriana Venturini PT, MSc, and others TBC

Access to the Instructor: (access to course coordinator TBC first class)

Adriana Venturini
Office: Davis House Rm 44
(514) 398-5541
adriana.venturini@mcgill.ca

Course Description: This course will give the student information on cancer pathology, risk stratification, the treatment process and rehabilitation needs throughout the disease trajectory. Targeted clinical issues will include rehabilitation of cancer-related fatigue, pain, lymphedema, radiation fibrosis, bone metastasis, muscle wasting (cachexia), and musculoskeletal dysfunction. Rehabilitation issues specific to patients with breast, lung, sarcoma, bone marrow transplants, and head and neck cancers will be addressed.

Course Structure: One three (3) hour lecture per week, for 13 weeks. One laboratory session or clinical site visit to take place during the term.

This course will be offered to students and graduates in Physical Therapy who have an interest in the field of Rehabilitation Oncology. An interdisciplinary whole-person approach to management of dysfunction in patients with a diagnosis of cancer will be emphasized. Invited speakers from within the McGill community of oncology specialists will be invited to share their expertise with students. Seminars will focus upon the evidence available in the literature relative to the benefits of rehabilitation interventions.

Instructional Methods: Weekly seminars include structured learning sessions or case-based discussions.

Student Learning Objectives: By the end of the course, the students will be able to:

1. Describe the rehabilitation needs related to:
 - Cancer pathology and its treatment
 - Specific cancers and the effects of surgical, chemotherapeutic and radiation protocols on functional capacity
 - Cancer cachexia anorexia asthenia syndrome
 - Cancer fatigue
 - Cancer pain
 - Lymphedema secondary to cancer treatment
 - Quality of life in patients undergoing treatment for cancer during different stages of disease progression
2. Derive a physiotherapy prognosis and describe an intervention strategy based upon:
 - Realistic goals and client-centered outcomes dependent upon the expected time course of survival
 - Improving quality of life
3. Implement a comprehensive intervention plan that may include but is not limited to:
 - Biophysical modalities
 - Manual therapy
 - Therapeutic exercise
 - Functional activity training
4. Select appropriate clinical and research outcomes and discuss research related to cancer rehabilitation through the process of:
 - Searching the cancer rehabilitation literature
 - Critical evaluation and synthesis of the cancer rehabilitation literature

Course Content:

- Overview of cancer pathology: Staging, growth, metastasis, and treatment protocols
- Overview of cancer rehabilitation: Restorative, adaptive, and palliative treatment interventions
- Breast cancer: Post-operative management (partial and total mastectomies with axillary node dissections), post-reconstruction rehab protocols (tram-flap procedures, prosthetic replacements), management of lymphedema, radiation fatigue, and chemotherapy-induced neuropathies
- Strategies for management of cancer fatigue: Nutritional interventions, exercise protocols, management of sleep disturbances

- Lung cancer: A multidisciplinary approach to control of pain, dyspnea, breathing pattern abnormalities, developmental scoliosis, fatigue and muscle loss
- Cancer cachexia: Multidisciplinary interventions including nutritional supplementation, resistance exercise training, and psychological support
- Bone marrow and stem cell transplantation: Rehabilitation interventions
- Palliative Care: The Cancer Nutrition-Rehabilitation Program at McGill
- Osteosarcoma and myosarcoma: Management of radiation fibrosis, amputations and reconstructions
- Head and neck cancers: Rehabilitation following surgery and reconstruction
- Biophysical modalities in patients with cancer: Guidelines for use based upon the stage of disease and physiological mechanisms underlying their effectiveness

Course Materials: On-line course pack and selected readings.

Student Assignment and Evaluation: (final version of student evaluation to be presented the first class.)

- Students will be evaluated by means of an in-class written test (25%), written report on a case history (25%), article review oral presentation (25%) and a final exam (25%), during the university examination period.

Please note that, 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. This course falls under the regulations concerning individual and group evaluation. Please refer to the section on marks Physical Therapy Master Program Course Guide.

Plagiarism/Academic Integrity: McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Please refer to Section 3.6 Examinations, of the 2011-2012 [McGill University Health Sciences Calendar](#) for information on University regulations regarding final examinations and supplementals: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

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

Attendance: Students are requested to attend all lectures/labs. Students who have missed more than 10% of laboratory sessions without a university-sanctioned reason for their absence, will see their final course mark reduced by 10%. Please refer to section on attendance in the course guide.

Right to Submit in English or French: 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, except in courses in which acquiring proficiency in a language is one of the objectives.

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. Late assignments are penalized 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 Office for Students with Disabilities at 398-6009 before you do this.

POTH 682 PROMOTING HEALTHY ACTIVITY

Credits: 3

Instructor: Deborah Da Costa, PhD
Office hours: **TBA**
(514) 934-1934 ext: 44723
deborah.dacosta@mcgill.ca

Course Description: This course will critically evaluate theory and empirical research related to healthy behaviour patterns. Determinants of health behaviours will be examined across the lifespan and in clinical populations. Application of behaviour change theories for the implementation and evaluation of health behaviour interventions will be discussed.

Course Structure: Four 4 hours per week for nine (9) weeks. Classes will consist of lectures, group discussions and student presentations.

Student Learning Objectives:

1. Describe relationships between health, wellness, illness and health promotion
2. Demonstrate an understanding regarding the determinants of health and illness with emphasis on the link between health-enhancing/compromising behaviours and health.
3. Explain and critique the various health behaviour theories.
4. Identify determinants that influence health behaviours in specific chronic conditions and through the lifecycle (i.e. children/adolescents, adults, elderly)
5. Apply behavioural theories to design interventions to promote health within the context of rehabilitation
6. Understand a variety of systematic methods for obtaining and interpreting various forms of data needed to develop an individualized behavior change intervention for specific age groups and clinical populations.
7. Critically interpret randomized and nonrandomized studies in the health behaviour change area.

8. Implement and critically evaluate interventions to promote health behaviour change and maintenance throughout the lifecycle and with clinical populations.
9. Identify and apply standards for evaluating effectiveness and adherence to behaviour change interventions.
10. Critically evaluate the influence of psychosocial and personal variables on individual response to behaviour change interventions.
11. Be sensitive to ethical issues related to health behaviour change.

Instructional Method: During this course the following instructional approaches will be used: lectures, group discussion and student presentations.

Following the introductory lectures, students will select a presentation topic relevant to the course objectives and critically present an overview of the topic.

Course Material: Assigned readings will be distributed by e-mail 1 week prior to the lectures and class presentations. Students will be expected to read the assigned reading before each class and be prepared for critical discussion during the class.

Method of Evaluation:

Thought Questions based on assigned readings	10%
Mini Group Discussion based on Thought question	20%
Oral Group Presentation	35%
Final Examination (multiple choice)	35%

Group Oral Presentation

Each group will pick a presentation topic relevant to the course objectives. Each group presentation will provide an overview of the topic and critically review an intervention or strategy designed to promote health or modify behaviour change (or adherence to a health enhancing behaviour) in the area. The analysis must consider the underlying goals and objectives of the intervention; outcome evaluation, theories, and evidence upon which the health strategy is based. The strengths and limitations of the strategy as applied to the selected topic must be identified.

One key research study or chapter related to your topic will be **identified 10 days prior to your presentation** so that it can be circulated to the class. Each student is expected to read the reading prior to the presentation and be prepared to discuss and ask questions in class.

Plagiarism/Academic Integrity: McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Please refer to Section 3.6 Examinations, of the 2011-2012 [McGill University Health Sciences Calendar](#) for information on University regulations regarding final examinations and supplementals: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Dress Code: Appropriate for a professional.

Attendance: Students are requested to attend all lectures and are required to attend all student presentations.

Right to Submit in English or French: 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, except in courses in which acquiring proficiency in a language is one of the objectives.

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 398-6009 before you do this.

POTH 639 MOTOR CONTROL

Credits: 3

Prerequisites: none

Instructors: Mindy Levin, PT, PhD (Co-ordinator)
Office: Hosmer Room 433
514-398-3994
mindy.levin@mbcill.ca

Invited lecturers

Date and time of lectures: TBA

Course Structure: Two 3 hour lectures per week for 4 weeks. One 3 hour lectures per week for 5 weeks.

Calendar Course Description: Theoretical course providing an overview of basic anatomy of the motor system, current knowledge of how movement is controlled by the nervous system and how motor skills are learned. In this professional complementary course, models of motor control will be introduced and discussed including the action-perception theory, force control theory, internal models and the equilibrium point theory. Motor learning theories related to muscular and neurological plasticity as it applies to orthopaedic and neurology clinical practice will be introduced and discussed. Emphasis will be placed on environmental and personal factors affecting motor learning such as cognitive, motivational, depression and self-efficacy.

Online Course Evaluations: Students are strongly encouraged to complete the online course evaluations at the end of the term. Data obtained from these evaluations are used to provide instructors with feedback as well as for identifying situations where a course or instructor needs assistance. The feedback and suggestions contained in the responses are highly valued and helpful in ensuring that instructors make appropriate changes to courses as needed in order to facilitate student learning.

General Learning Outcomes: The student will:

1. Understand and apply current theories of the production and organization of movement;
2. Understand and apply current theories of motor learning and use of extrinsic information;
3. Apply elements of motor control used to assess movement quality and motor learning in the evaluation and treatment of simulated cases in orthopaedics and neurology.

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

1. Critically discuss the main aspects of current models of motor control;
2. Critically discuss the main aspects of theories of motor learning;
3. Appraise the evidence for the effectiveness of different types and delivery schedules of feedback for motor learning in different patient populations;
4. Integrate motor control and motor learning theories in the design of treatment approaches to optimize motor function in different patient populations.

Course Content:

1. Introduction: Course content and requirements
Review of basic anatomy and physiology of the sensorimotor system
2. Motor Control Theories 1: historical perspective, philosophy of motor control, early motor control theories starting from Sherrington (e.g., motor programming, schema theory).
3. Motor Control Theories 2: dynamical approaches/modeling/equilibrium-point theory
4. Motor Control Theories 3 – equilibrium point theory, Controversies in motor control
5. Motor Control Principles 1 - involuntary vs voluntary actions
6. Motor Control Principles 2 - threshold position control
7. Motor Control Principles 3 - advanced notions of motor control
8. Motor Learning 1 - historical overview and current theories
9. Motor Learning 2 – used of enhanced information – feedback
10. Neural plasticity, compensation and recovery
11. Written final exam
12. Oral presentations
13. Oral presentations

* Note: Each 3-hour session comprises of 2 hours of theory and 1 hour of small group discussion with clinical examples. Some lectures/labs will be given in different buildings across the campus, and sometimes off campus.

Instructional Methods: The course combines lectures and small group discussion

Course Materials: Assigned readings

Student assignments and Evaluation:

Participation **10%**

Attendance in class and participation in small group discussions

Two reading assignments worth 20% each - individual **40%**

Students will be assigned a research paper to read in each of weeks 3 and 6 of the course for which they will prepare a 5 page (1.5 spacing, 12 Times New Roman font) assignment that includes a) a summary of the papers and b) an application of the ideas presented in the paper to physical therapy or sport.

Written final exam **30%**

Multiple choice and short-answer questions based on material presented in class and readings.

Oral presentation **20%**

Students will design a treatment approach for the rehabilitation of a selected sensorimotor problem for patients with a musculoskeletal or neurological problem, based on a current theoretical approach to motor learning and/or motor control. The topic of the presentation will be selected jointly by the students and instructor. Students will work in groups of 3 to 6 depending on enrollment. Twenty minute presentations will be done in class.

Special Requirements for Course Completion and Program Continuation:

In order to pass the course, a grade of at least B- (70%) must be obtained as a total course mark. Please refer to Section 3.6 Examinations, of the 2011-2012 [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: 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. For more information please refer to: www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Attendance: Students who have missed more than 10% of small group sessions without prior approval will lose 10% of their total course mark.

Right to Submit in (English or in) French: Every Student has a right to write essays, examinations, and theses in English or in French except in courses where knowledge of a language is one of the objectives of the course.

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 398-6009 before you do this.

PHTH 662 ADVANCED MANUAL THERAPY

Credits: 3

Instructor: Isabel Audette, Pht, FCAMT, MSc (Coordinator)

Course Guide will be available in February 2012

POTH 620 MEASUREMENT IN REHABILITATION I

Credits: 3

Semester Offered: Winter. Registration for this course by the professional masters students is possible only if : there is space, permission from the instructor is obtained and the schedule permits attendance, as the winter term for the professional masters students starts with a 7 week clinical placement.

Coordinators: Mr. Richard Preuss Dr. Philippe Archambault
richard.preuss@mcgill.ca philippe.archambault@mcgill.ca

Course Description: Theoretical and practical basis or utilization of electronic equipment for quantitative measurement in rehabilitation research. Ambulatory assistive devices, electronic plates and instrumentation to assess normal and pathological human movement will be used to demonstrate the application of theory and techniques for quantitative analysis of human performance. Recording, reduction and analysis of electromyographic, kinetic and kinematic data included.

Objectives:

1. Summarize basic principles that allow the collection of quantitative data using modern electronic equipment applicable to a clinical setting.
2. Explain why the acquisition, conditioning, processing, analysis and graphical presentation of electrical signals from sensors and transducers are useful and necessary.
3. Discuss the assumptions and simplifications that exist in laboratory and clinical research due to the inherent limitations of the instrumentation and measurement techniques.
4. Apply these concepts to comprehend:
 - a. the rationale of data acquisition systems presented in scientific papers or thesis research work;
 - b. the purpose of data processing and data handling algorithms utilized during research;
 - c. the potential sources of error that arise during experimentation.
5. Analyze published research results in terms of equipment set-up, data acquisition and handling of the experimental data.

Required and/or Recommended Readings: A set of the assigned readings will be made available to the students at least one week prior to each lecture. Lecture notes will also be made available, when possible.

Method of Evaluation: The students will be expected to prepare a targeted summary of the individual lectures. Summaries are worth 20% of final grade and should be no more than 2 pages for each lecture. Students will also prepare a document describing the instrumentation required and the measures to be obtained to quantitatively analyze a biomechanical or physiological parameter of relevance in rehabilitation.

Plagiarism/Academic Integrity: 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. For more information please refer to:
www.mcgill.ca/files/integrity/Code_of_Student_Conduct.pdf

Right to Submit in English or French: 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, except in courses in which acquiring proficiency in a language is one of the objectives.

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 398-6009 before you do this.

POTH 685 PERCEPTION AND ACTION

Credits: 3

Coordinator: Anouk Lamontagne, PhD, PT
anouk.lamontagne@mcgill.ca

Course Description/Topic Description: This is a weekly lecture / seminar / laboratory course. It is designed to expose students to new research concepts related to perception and action, with a special emphasis on the understanding of motor behaviour and the exploration of potential applications in rehabilitation.

Specific Objectives: By the end of the course, the student will be able to:

1. Understand the fundamentals of visual, auditory and vestibular function.
2. Explain the interactions between sensory perception and motor action in the control of voluntary movement, posture and locomotion.
3. Explain the role of executive cognitive function on motor performance.
4. Discuss and critique the theoretical and practical implementation of augmented sensory feedback and/or virtual reality therapies to improve motor performance and behaviour.
5. Participate, as a co-experimenter, in a practical demonstration/laboratory on a topic related to perception and action *.

Course Content:

- I. Introduction: Sensory perception, movement and behaviour
- II. Visual perception (& movement)
- III. Auditory perception (& movement)
- IV. Vestibular function (& movement)
- V. Motor learning
- VI. Executive cognitive function and motor performance
- VII. Spatial memory and human navigation
- VIII. Sensorimotor integration in human posture
- IX. Sensorimotor integration in locomotion
- X. Rehabilitation Series: pain and movement
- XI. Rehabilitation Series: virtual reality and mobility
- XII. Rehabilitation Series: clinical cyberpsychology, CBT
- XIII. Practical/ Integration session

* Note: Each 3-hour session comprises of 2 hours of theory and 1 hour of practical laboratory demonstration in which students will be actively engaged. In order to

have access to the different research facilities, some lectures/labs will be given in different buildings across the campus, and sometimes off campus.

Required and/or Recommended Readings: The reading list will be provided by the course coordinator in collaboration with the faculty member or guest speaker responsible for the session. Most journal articles are accessible online through McGill Library and can be saved and printed directly from the web. When not accessible online through McGill Library, a paper copy of the readings will be provided at least one week prior to the class. Students are expected to have read the assigned readings prior to the class and be prepared to discuss them and ask questions during the class.

Evaluation:

- **Mid-term exam (50%):** An ‘open book’ written examination covering the material presented during session I to session VII.
- **Written Assignment (30%):** A 5-page written assignment (double-spaced) on one of the topics presented in class. The questions will be provided by the researcher who presented the course material and marked by this same person.
- **Practical (20%):** Attendance (5%) and active participation (15%) to practical demonstrations and laboratories will be marked by the course coordinator and, when applicable, by the guest speaker or researcher responsible for the session.

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