

## POTH 401: RESEARCH METHODS

<b>Credits:</b>	3
<b>Instructor:</b>	Ana Maria Moga, PT, MSc., PhD (c.) Office: Davis House, B6 <a href="mailto:ana.moga@mcgill.ca">ana.moga@mcgill.ca</a>
<b>Virtual office hours:</b>	By appointment
<b>Course schedule:</b>	Tuesdays and Fridays, 9:00-10:30 am
<b>Pre-requisites:</b>	Successful completion of courses from previous years

### Course Objective:

The purpose of this course is to expand knowledge and skills related to rehabilitation research, in order to critically appraise scientific evidence and to actively participate in clinical research projects.

### Course Description:

The course encompasses three key parts: the first part introduces concepts and terms central to health care research; the second part focuses on introducing various research designs and the last part covers specialized areas that are pertinent to rehabilitation research. Subject experts are invited for certain topics as indicated in the course schedule.

### Course Structure:

Two sessions of 1.5h per week for 13 weeks (lectures, interactive workshops or self-directed sessions as appropriate). Structured seminars presented by groups of students on assigned research papers. The short question period that follows will also be led by assigned groups of students that rotate on a weekly basis. A more detailed course schedule is posted on myCourses at the start of term. Students are encouraged to consult myCourses regularly for announcements, course updates and other pertinent information. Polling will be used in this course to enhance engagement and increase interactivity.

### Instructor Message Regarding Remote Delivery:

The remote learning context presents new challenges for all involved. We acknowledge the challenges that students may be experiencing due to the pandemic and are committed to do our best to provide a supportive learning environment and to foster student engagement. Please check these resources to ensure your academic success: [Student-specific Guidelines for Remote Teaching and Learning](#)

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### **Instructional Method:**

This course will use a combination of flexible activities (students participate online at any time of their choosing) and fixed activities (students participate together online at the same time via zoom). Students will be asked to read the preparatory reading material and listen to recorded lectures prior to the zoom sessions on Tuesdays at 9:00 am. For Zoom tutorials, please see McGill's [Remote Learning Resources](#).

**A web-based polling system, called TurningPoint** may be used at times in this course to enhance student engagement and increase interaction. When used, this live-polling system allows the instructor to ask questions and students answer from a personal device (smartphone, tablet, or laptop).

- The Polling software can be freely downloaded at [www.mcgill.ca/polling](http://www.mcgill.ca/polling)
- **To participate in Polling sessions, you MUST first register for an account by clicking on “Register Your Account”** at [www.mcgill.ca/polling](http://www.mcgill.ca/polling) and logging in with your McGill username and password.
- For more information, please visit the “Getting Started for Students” section at [www.mcgill.ca/polling](http://www.mcgill.ca/polling). For any technical problems with polling, please contact the IT Service Desk: <http://www.mcgill.ca/it/get-started-it/need-help> If you do not have a phone, tablet, or laptop to use to respond to polling questions, please contact the instructor as soon as possible.
- To maintain a safe and respectful classroom environment, please ensure that any **polling responses you submit are appropriate and relevant to the question asked**. Please note that unless the poll is labelled as anonymous, your responses are identifiable to the instructor. Please see the [Code of Student Conduct and Disciplinary Procedures](#).

**Expectations for Student Participation:** Students are expected to listen to all recorded lectures and read the preparatory reading material posted on MyCourses prior to the Zoom sessions on Tuesdays at 9:00 am. During the Zoom sessions, students are expected to participate by commenting or asking questions via audio or using the chat function. For some of the sessions, small group discussions (breakout rooms on zoom) will be created and students are expected to attend.

### **Recordings of Sessions**

When a lecture will be recorded students must consent to being recorded. You will be notified through a ‘pop-up’ box in Zoom if a lecture or portion of a class is being recorded. By remaining in sessions that are recorded, you agree to the recording, and you understand that your image, voice, and name may be disclosed to classmates. You also understand that recordings will be made available in myCourses to students registered in the course. Additional information, tutorials or technical support can be obtained through McGill’s Remote Learning Resources: <https://www.mcgill.ca/tls/students/remote->

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**Student Learning Outcomes:** This course will cover essential competencies and milestones related to the domains of scholarship and collaboration. Upon completion of this course, students will be able to:

Learning objectives	PT-related professional milestones *	OT-related professional roles **
Identify the components and formulate clinical and research questions related to rehabilitation.	6.2.2	Scholarly practitioner
Access reliable sources of information.	6.2.3	Scholarly practitioner
Carry out critical appraisal of research articles, and formulate a summary of appraisal findings.	6.2.4	Scholarly practitioner
Use appropriate terminology for describing and classifying study variables and outcome measures.	6.2.6	Scholarly practitioner
Describe the key features, strengths, weaknesses, and sources of bias of various experimental and observational study designs (cross sectional studies and surveys, case-control, cohort, randomized control trial, single subject, cross-over, and quasi-experimental).	6.2.6	Scholarly practitioner
Identify the steps and methods of a systematic review and interpret the basic findings of a systematic review.	6.2.6	Scholarly practitioner
Understand common approaches and methods of qualitative research.	6.2.6	Scholarly practitioner
Apply principles of knowledge translation to clinical examples, and identify common barriers to knowledge translation.	6.2.6	Scholarly practitioner
Understand and implement the key elements and processes in research ethics.	6.2.1	Scholarly practitioner
Describe the major types of economic and cost-effectiveness analyses, and calculate indices that reflect the benefits of health interventions.	6.2.6	Scholarly practitioner
Develop skills and confidence in presenting published primary scientific research to an audience of your peers, including the ability to ask and answer questions.	6.5.2	Scholarly practitioner
Work collaboratively in intra and/or inter-professional groups.	3.2.4; 3.25; 3.3.1; 3.3.3; 3.3.4	Collaborator

For description of each numbered milestone refer to

\*Competency Profile PT in Canada [https://physiotherapy.ca/sites/default/files/competency\\_profile\\_final\\_en.pdf](https://physiotherapy.ca/sites/default/files/competency_profile_final_en.pdf)

\*\* Profile OT in Canada <https://www.caot.ca/document/3653/2012otprofile.pdf>

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**Required Course Materials:**

- **Required text:** Rehabilitation Research. 4th ed. Carter, R.E., Lubinsky J., Domholdt E. Elsevier Saunders; St. Louis, Missouri, 2011.
- ISOQOL Dictionary of Quality of Life and Health Outcomes Measurements. 1st ed. Mayo, N. ISOQOL, 2016.
- **Additional readings:** Additional preparatory reading for each class will be posted on MyCourses. Students are strongly encouraged to read the assigned readings prior to class and be prepared for the discussions via zoom.
- © **Instructor-generated course materials** (e.g., handouts, notes, summaries, exam questions) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

**Course Content:** Please refer to the course schedule on MyCourses.

**Student Assignment and Evaluation:**

Assignment/Evaluation	Weight	Milestones Assessed
Assignment 1	15%	6.2.2
Midterm exam	30%	6.1.1; 6.2.2; 6.2.6
Assignment 2	10%	6.2.3
Group Oral Presentation	10%	6.5.2; 3.2.4; 3.2.5; 3.3.1; 3.3.3; 3.3.4
Final Paper	25	6.2.4; 3.2.4; 3.2.5; 3.3.1; 3.3.3; 3.3.4
Participation*	10	6.1.1; 6.2.2; 6.2.6

\*Participation graded by polling will be delayed until the end of the add/drop period.

**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 C+ (60%) must be obtained as a total course mark. Please refer to the appropriate section in the Health Sciences Calendar on University regulations regarding final and supplemental examinations. The student’s mark will be affected by late submission of the assignment.

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

**Plagiarism/Academic Integrity:** [Amended by Senate on April 17, 2013]: “McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures” (see [McGill’s guide to academic honesty](#) for more information).

Since polling records may be used to compute a portion of course grades, **responding as someone other than yourself is considered an academic offense**. During class, possession of more than one response device or using the credentials of another student will be interpreted as intent to commit an academic offense. Please refer to McGill’s policy on Academic Integrity and Code of Conduct (see <http://www.mcgill.ca/deanofstudents/plagiarism> and <http://www.mcgill.ca/students/srr/honest> )

*“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 [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/)).

**Right to submit in English or French written work that is to be graded:** In accord with McGill University’s Charter of Students’ Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.

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

**Consequences of Not Completing Assignments as Requested:** An individual who does not complete a required assignment and does not have a university recognized reason for deferral would receive a 0 in that portion of the evaluation.

**Assessment:** The [University Student Assessment Policy](#) exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads. All students and instructors are encouraged to review this Policy, which addresses multiple aspects and methods of student assessment, e.g. the timing of evaluation due dates and weighting of final examinations.

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**Course evaluations:** End-of-course evaluations are one of the ways that McGill works towards maintaining and improving the quality of courses and the student's learning experience. You will be notified by e-mail when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.

**Disability:** As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the [Office for Students with Disabilities](#), 514-398-6009.

Additional policies governing academic issues which affect students can be found in the [Academic Rights and Responsibilities](#)

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