

POTH 401 RESEARCH METHODS

Credits: 3

Prerequisites: Successful completion of previous year courses.

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Guest lecturers (see course schedule)

Course Objective: The purpose of this course is to expand knowledge and skills related to rehabilitation research, in order to: 1) critically appraise scientific evidence and 2) be an accomplished knowledge-user.

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

Scholarly Practitioner:

1. Understand the role of rehabilitation research in evidence-based practice.
2. Identify the components and formulate clinical and research questions related to rehabilitation.
3. Understand questionnaire and survey design.
4. Describe the key features, strengths, weaknesses, and sources of bias of various experimental and observational study designs.
 - a. Cross-sectional
 - b. Case-control
 - c. Cohort
 - d. Randomized controlled trial
 - e. Single-subject, cross-over and quasi-experimental
5. Understand common approaches and methods of qualitative research.
6. Use appropriate terminology for describing and classifying study variables and outcome measures.
7. Understand and interpret the metric properties and practical considerations in the use of measures, in both clinical and research contexts.
8. Apply principles of knowledge translation to clinical examples, and identify common barriers to knowledge translation.

9. Understand and implement the key elements and processes in research ethics.
10. Describe the major types of economic and cost-effectiveness analyses, and calculate indices that reflect the benefits of health interventions.
11. Identify the steps and methods of a systematic review and interpret the basic findings of a systematic review.
12. Carry out critical appraisal of research articles, and formulate a summary of appraisal findings.

Collaborator:

13. Work collaboratively in intra and /or inter –professional groups.

Instructional Method: Two (2) 1.5 sessions per week for 13 weeks. Instructional approaches that will be used are: lectures, interactive sessions, group projects. Technologies will also be used through polling and MyCourses. Lectures will be audio-recorded, classroom sound system permitting.

Information about Polling

- During a class with polling questions, you will respond to questions from the instructor from a personal device (smartphone, tablet, or laptop).
- Students should come to class with their devices charged and [connected to the Internet](#).
- Polling will be available through www.mcgill.ca/polling.
- For your responses to be connected to your username for participation grading, you **MUST** first register for an account by clicking on “Register Your Account” at www.mcgill.ca/polling and logging in with your McGill username and password.
- 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 immediately in order for appropriate arrangements to be made.
- 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](#).

Requierd Course Materials:

Rehabilitation Research. 4th ed. Carter, R.E., Lubinsky J., Domholdt E. Elsevier Saunders; St. Louis, Missouri, 2011.

Additional readings: Additional readings will be assigned during the course.

Course content: Please refer to class schedule.

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

Student Assignment and Evaluation:

Assignment/Evaluation	Marks
Assignment 1	10
Assignment 2	10
Midterm exam	35
Final Paper	35
Participation*	10

*Participation will be assessed through: polling (6%) and lecture summary (4%). Participation grading 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.

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: 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](#)

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/)."

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.

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."

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.

Additional policies governing academic issues which affect students can be found in the McGill Charter of Students' Rights (see the [Handbook on Student Rights and Responsibilities](#)).