

POTH 684- Advanced Practice in Stroke Rehabilitation

Number of credits: 3 Semester offered: Winter

Course coordinator: Dr. Anita Menon anita.menon@mcgill.ca

Course description: This course aims to facilitate advanced learning specific to evidence-based stroke rehabilitation management (i.e. screening, assessment and treatment). The course is designed for rehabilitation professionals (primarily occupational therapists and physical therapists) who work in stroke rehabilitation at any point across the stroke continuum of care including acute care; in-patient rehabilitation and, community-based services.

Learning outcomes

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

SCHOLARLY PRACTITIONER

- 1. identify key resources to guide evidence-based decision-making in stroke rehabilitation
- 2. critically appraise the stroke rehabilitation research and provide an evidence-informed response to a stroke-related PICO question;
- 3. evaluate how best practices for stroke rehabilitation management (screening, assessment, treatment) and clinical reasoning can be integrated and applied for a typical client based on their stage of stroke recovery and client characteristics

COLLABORATOR

- 4. evaluate how various health professionals (e.g. neurologist, nurse, social worker, etc.) intervene with a typical client post-stroke based on their expected roles within an interdisplinary team and evidence-based recommendations for stroke management
- 5. coach their peers about the OT/PT role in stroke rehabilitation management

MANAGER

 analyze characteristics of the clinical setting (stroke units, structure and process of care), and clinician (habits, continuing education, self-efficacy) that faciliate or hinder collaborative evidence-based practice for improving patient outcomes in stroke rehabilitation

EXPERT

- 7. evaluate issues related to optimal timing, intensity and matching of stroke treatment interventions based on individual client characteristics, impairments and preferences;
- create client-centered goals and an individualized assessment/treatment plan for a typical client based on their stage of stroke recovery and client characteristics within the context of an interdisciplinary team-based care plan;
- 9. administer specific standardized evidence-based screening tools and assessments, as well as effective treatments using simulated patients



- 10. apply clinical reasoning skills when observing a client post-stroke during a live in-patient rehabilitation session and providing real-time evidence-based recommendations for stroke management (screening, assessment, treatment, discharge destination, etc.)
- 11. evaluate a client's suitability and eligibility as a rehabilitation candidate based on evidence-based guidelines and clinical reasoning skills

Course content: This course will focus on current knowledge of best practices in the area of stroke rehabilitation. Throughout the course, students will have the opportunity to learn the "how to" of screening, assessment, and intervention using simulated patients. In addition, the content has been created to provide students with critical appraisal skills specific to stroke methodology that will further their acquisition of best practice information and principles in stroke rehabilitation.

Eligibility: This course is open to professional masters level students in the School of Physical and Occupational Therapy; graduate students in Rehabilitation undertaking either a thesis masters or PhD; and, occupational therapists and physical therapists who have met their College or Association requirements for practice along with any specific requirements for entrance into a graduate level course at McGill University. The course may also be taken, with permission and at the discretion of the course coordinator, by speech-language pathologists, nurses, psychologists, social workers, physicians, as well as others health care providers involved in stroke rehabilitation. The final decision regarding acceptance into the course is the prerogative of the course coordinator and the School of Physical and Occupational Therapy, McGill University.

Prerequisites: This course does not have any specific prerequisites.

Instructional methods: The course will include synchronous (real-time) lectures delivered inperson and online via Zoom (McGill University – Zoom), asynchronous (pre-recorded) lectures posted on MyCourses, online readings, web-based resources, interactive group discussions and/or assignments during lecture time, practical demonstrations, case studies, and videos, in order to help students master the theoretical concepts and practical application of stroke rehabilitation. The course is taught in a modular format.

Course materials: Each module will have an in-person or online synchronous lecture, along with an asynchronous (pre-recorded) lecture and presentation slides, as well as assigned readings. All content and Zoom links will be posted on myCourses. It is the student's responsibility to review the asynchronous (pre-recorded) lecture, its presentation slides and read all assigned readings prior to each synchronous lecture. Presentation slides for the synchronous lectures will be made available before or following the end of each lecture. All synchronous lectures will be recorded (in the presence of lecture recording systems or via Zoom, if available) and posted on myCourses.

Electronic device with Internet and/or phone

Students are requested to use an electronic device with Internet access (e.g. laptop, tablet, smartphone) in order to access course materials on myCourses and participate in synchronous lectures offered remotely via Zoom. You can also join the lecture by telephone using the Zoom



Call-in number and Meeting ID. In the event that access to an electronic device with Internet is not possible during the course, students are encouraged to inform the instructor as soon as possible.

Required online readings/resources for assignments, quizzes and class discussions:

- 1. Articles posted on myCourses
- 2. Stroke Engine: http://www.strokengine.ca/
- 3. Canadian Stroke Best Practices (CSBP):

Recommendations https://www.strokebestpractices.ca/recommendations

- a) Secondary prevention of stroke (1-5)
- b) Acute stroke management (1, 5, 8, 9)
- c) Rehabilitation and recovery following stroke (1-10)
- d) Transitions and community participation following stroke (1-5)
- e) Mood, cognition & fatigue (1-3)

Professional Resources https://www.strokebestpractices.ca/resources/

- f) Taking Action for Optimal Community and Long-Term Stroke Care
- g) Post-stroke Checklist

Patient and Caregiver Resources https://www.strokebestpractices.ca/resources/

- h) Your stroke journey: a guide for people living with stroke
- i) TIA fact sheet
- j) Are you at risk for heart disease or stroke?

OPTIONAL Webinars https://www.strokebestpractices.ca/resources/webinars

- k) Spasticity: The who, why, when and how
- I) Resumption of life roles following stroke: Intimacy after stroke
- m) Mental health associations and impacts on recovery from stroke, heart condition and vascular cognitive impairment
- n) Mind and body fitness: What really works
- o) Virtual care in Rehabilitation

Other useful resources for clinical practice:

EBRSR- Evidence-Based Review of Stroke Rehabilitation: http://www.ebrsr.com

Method of evaluation

• Final assignment (FA): 30%

This final assignment will provide the student with an opportunity to test their knowledge specific to key issues in stroke rehabilitation and specific to patient management – including identification of patient problems, making a differential diagnosis; as well as determining optimal assessment and intervention practices. The student will make use of the best practice guidelines and the evidence of intervention effectiveness to complete the assignment. This assignment will be completed **individually** and submitted electronically.



Two group assignments (GA): 25% each

Students will work collaboratively on case studies that offer practical opportunities to apply assessment and treatment principles and discuss differential diagnosis; patient-specific characteristics and how these influence treatment choices. By working on this assessment in a group context, students are encouraged to practice applying the best practice knowledge to the specific patient context using a "team approach". The group assignments will be submitted electronically.

• Four quizzes (Q): participation in finding and reviewing of evidence: 5% each

These quizzes will help the student operationalize an efficient process by which they quickly seek, evaluate and apply new stroke evidence as it emerges. Students will evaluate the current evidence specific to an intervention or assessment of interest, critique the quality of the evidence, and prepare recommendations specific to the use of the intervention/assessment according to patient characteristics and time since stroke onset. This is an important real-world skill for evidence-based stroke rehabilitation practice. Quizzes will be completed and submitted online or on paper.

Marks on assignments and quizzes will be posted on myCourses. Detailed feedback on assignments will be sent to students by email.

SCHOOL POLICIES

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

Attendance

Students are expected to review the assigned readings prior to each class and <u>attend all synchronous lectures offered in-person or online via Zoom</u>. It is the responsibility of each student to attend all classes prepared and be actively involved. Although attendance will not be taken, the materials covered in class will be subject to evaluation. It is common professional courtesy to attend lectures scheduled in health care institutions. If a synchronous lecture will be missed, the instructor must be informed as soon as possible with proper justification. Your respectful, active and attentive presence is expected during in-person and remote lectures: while your audio should be muted during the synchronous lectures offered remotely via Zoom and you can choose to keep your video camera on or off, you are encouraged to ask questions (using chat feature) during the presentation as well as actively participate in group discussions and/or assignments during lecture time.

Right to write 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 objects of the course."



Special requirements for course completion and program continuation: Assignments not competed on time will be penalized 5% of the total mark per day, including weekends. If an assignment cannot be submitted on its due date, students are encouraged to inform the instructor as soon as possible with proper justification. To pass the course, a grade of at least B-(65%) must be obtained as a total course mark.

Course Accessibility: If you experience barriers to learning in this course and require accommodations, please contact the instructor to arrange a time to discuss your situation. Students must contact the <u>Student Accessibility and Achievement</u>, 514-398-6009 to receive any specific accommodations for the course or assessments.

Professional Conduct: Professionalism and accountability are expected throughout the course of the semester. This includes the on-going respectful nature of teacher-student as well as student-student interactions. Professionalism with respect to dress is encouraged throughout the course of the semester especially while on site visits. It is each student's responsibility to have appropriate attire during all class assignments and learning activities.

Plagiarism/Academic Integrity: McGill University and the Faculty of Medicine and Health Sciences value academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the McGill University Code of Student Conduct and Disciplinary Procedures and the Faculty of Medicine and Health-Sciences Code of Conduct

L'université McGill et Faculte de Medecine et des Sciences de la Sante attachent une haute importance à l'honnêteté académique. Ils incombent par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le <u>Université de McGill Code de conduite de l'étudiant et des procédures disciplinaires</u> et <u>Faculté de médecine et des sciences de la santé</u>.

Statement regarding Copyright of instructor-generated course materials: Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions, lecture recordings 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. This means that each of you can use it for your educational (and research) purposes, but you cannot allow others to use it, by putting it up on the Internet or by giving it or selling it to others who may also copy it and make it available. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

Technology in Class: Your respectful attentive presence is expected, therefore while you are permitted to use electronic devices in class, it is understood that you will not be using these devices for social purposes during class time. Your electronic devices should be on silent mode during class time and phone calls should only take place during the break or after class.



Statement regarding Diversity: The Occupational and Physical Therapy Program recognizes our responsibility to foster a learning environment where students and instructors can engage in dialogue and exchange ideas without being made to feel unwelcome or disrespected in view of their identity or beliefs. The Program intends that the instructional design of all courses minimize any barriers to participation, particularly barriers based on age, biological sex, disability, gender identity or expression, indigenous ancestry, linguistic and cultural background, race/ethnicity, religion, sexual orientation, political views, opinions, ideologies, and any other aspect integral to one's personhood. We therefore recognize our responsibility, both individual and collective, to strive to establish and maintain a respectful environment that is free from discrimination.

Health and Wellness resources: Student well-being is a priority for the University. The Student Wellness Hub is a resource for student physical and mental health. If you need to access services or get more information, visit the Virtual Hub at mcgill.ca/wellness-hub or connect with a Local Wellness Advisor (www.mcgill.ca/lwa)