

## PHTH 652: INTEGRATED CLINICAL EXERCISE REHABILITATION

Credits: 3

**Instructor**: Tania Janaudis-Ferreira, Associate Professor

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**Office hours**: Upon request (In-person or virtual)

**Communication plan:** Office hours or via email

Course schedule: Thursday, 14:30 pm – 17:30 pm and Wednesday 14:30 pm – 17:30 pm

**Pre-requisite(s):** Successful completion of all U3/qualifying year courses including

PHTH 552 Cardiorespiratory Rehabilitation

Course Overview (Physical Therapy): The burden of chronic diseases is increasing and will continue to grow worldwide in the next years (WHO 2015 and UN 2020). Three out of five Canadians aged 20 and older have a chronic disease and four out of five are at risk (Government of Canada 2020). According to the World Health Organization, chronic diseases are responsible for 36 million deaths globally (WHO 2015). This is a case-based course that presents current topics in exercise rehabilitation in adult patients with selective chronic diseases and/or multimorbidity. The two main learning goals for the students taking this course are to 1) describe how the pathophysiology underlying different chronic conditions affect the major physiological systems and 2) identify the optimal way of assessing and prescribing exercise interventions for these special populations to improve physical function, exercise capacity and quality life and reduce morbidity and mortality. This course also aims to enhance critical thinking and problem-solving skills through interactive lectures, clinical reasoning workshops and assignments.

**Specific Learning Outcomes:** This course will cover essential competencies and milestones related to the domains of physiotherapy expertise, communication, collaboration, leadership, scholarship, professionalism. Upon completion of this course, the student will be able to:

| Learning objectives   | Milestones |
|---|------------|
| Describe how the pathophysiology underlying selective chronic             | 1.4.2      |
| conditions and multimorbidity affect the response of the major            | 1.4.3      |
| physiological systems (respiratory, cardiovascular, neurological, and     |            |
| musculoskeletal) to exercise.   |            |
| Describe the preventative and therapeutic benefits as well as the chronic | 1.5.1      |
| adaptations that result with exercise in clients with chronic             | 1.5.2      |
| diseases/multimorbidity.  |            |



| Learning objectives   | Milestones |
|---|------------|
| Identify the indications, risks and contraindications associated with     | 1.3.4      |
| engaging special populations with complex problems and comorbid           | 1.3.5      |
| conditions in exercise.   | 1.3.6      |
| Conditions in exercise.   |            |
| Identify the optimal tools to assess aerobic fitness, functional exercise | 1.3.7      |
| capacity, strength, flexibility, balance and coordination of selective    | 1.4.1      |
| populations, taking into account the medical, environmental and           |            |
| psychosocial aspects and understand how to interpret assessment data.     |            |
| psychosocial aspects and understand now to interpret assessment data.     |            |
| Establish and maintain inter-professional relationships, during group     | 3.2.1      |
| assignments and presentations   | 3.2.4      |
| assignments and presentations   | 3.2.5      |
|   | 3.3.1      |
|   | 3.3.2      |
|   | 3.3.4      |
|   | 3.4.1      |
|   | 3.4.2      |
| Demonstrate effective and appropriate verbal, nonverbal, and written      | 2.1.1.     |
| communication when interacting with peers and instructors when            | 2.1.2      |
| appropriate throughout the course.  | 2.1.4      |
|   | 2.2.1      |
|   | 2.2.2      |
|   | 2.3.1      |
|   | 2.3.4      |
| Apply skills in literature searching, information retrieval, and critical | 6.1.1      |
| appraisal to be informed about current topics in exercise rehabilitation, | 6.1.2      |
| clinical conditions and effectiveness and safety of therapeutic exercise  | 6.1.3      |
| programs  | 6.1.4      |
|   | 6.2.3      |
|   | 6.2.4      |
|   | 6.4.1      |
|   | 6.4.2      |

Attendance: Students are required to attend all scheduled classes. (Except in the case of a prior approved absence or an emergency situation with a subsequent approval, students who have missed more than 15% of the classes will have their final mark reduced by 10%. (please refer to Rules and Regulations document))

## **Required Course Materials:**

• Required text: ACSM's Guidelines for Exercise Testing and Prescription. <u>11th ed</u>. Baltimore (MD): Lippincott Williams & Wilkins; 2021.



- 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 <u>be prepared</u> for the discussions in class.
- © 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 schedule of the course on MyCourses.

## **Evaluation:**

| Assignment/Evaluation    | Value | Due Date | Milestones Assessed |
|--------------------------|-------|----------|---------------------|
| Quizzes, pre-lecture     | 20%   |          | 6.2.3               |
| questions and            |       |          | 6.2.4               |
| assignments              |       |          | 1.3.7               |
| Group Work-CERT          | 15%   |          | 6.3.1               |
| Checklist                |       |          | 6.5.2               |
|                          |       |          | 6.2.3               |
|                          |       |          | 6.2.4               |
| Oral Presentation        | 30%   |          | 1.3.4               |
| (individual work)        |       |          | 1.3.5               |
|                          |       |          | 1.3.6               |
|                          |       |          | 1.3.7               |
|                          |       |          | 1.4.1               |
|                          |       |          | 1.4.2               |
|                          |       |          | 1.4.3               |
|                          |       |          | 1.5.1               |
|                          |       |          | 1.5.2               |
|                          |       |          | 6.1.1               |
|                          |       |          | 6.1.2               |
|                          |       |          | 6.1.3               |
| Final Exam (new clinical | 35%   |          | 1.3.4               |
| case; individual work;   |       |          | 1.3.5               |
| open book)               |       |          | 1.3.6               |
|                          |       |          | 1.3.7               |
|                          |       |          | 1.4.1               |
|                          |       |          | 1.4.2               |
|                          |       |          | 1.4.3               |
|                          |       |          | 1.5.1               |
|                          |       |          | 1.5.2               |



**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 individual and group evaluation. Please refer to the section on Marks of the Rules and Regulations document.

**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 <a href="McGill University Code">McGill University Code of Student Conduct</a> and <a href="Disciplinary Procedures">Disciplinary Procedures</a> and the <a href="Faculty of Medicine">Faculty of Medicine</a> and <a href="Health Sciences">Health Sciences</a> 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>.

**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).

**Assessment:** The <u>University Student Assessment Policy</u> 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.

**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.

**Course Accessibility:** 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 <u>Student Accessibility and Achievement</u>, 514-398-6009.

Additional policies governing academic issues which affect students can be found in the <u>Academic</u> 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.