

## **POTH 637 CURRENT TOPICS IN REHABILITATION**

### **Cancer Rehabilitation**

**Credits:** 3 credits

**Prerequisites:** Successful completion of all U3/Qualifying year courses and at least one clinical placement

**Course coordinator and primary instructor:** Ana Maria Rodriguez, PhD  
MSc PT

**Course co-coordinator:** Marize Ibrahim, MSc PT

**Guest lecturers:** Shirin Shallwani PT MSc, Thomas Jagoe MD, MSc, Melissa Turner PT, Claudia Brown PT, Nelda Swinton CN, Melissa Henry PhD

#### **Access to the Course Coordinator:**

Email: [ana.rodriquez@mcgill.ca](mailto:ana.rodriquez@mcgill.ca)

Office: By appointment only

**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 symptoms such as fatigue, pain, lymphedema, radiation fibrosis, bone metastasis, muscle wasting (cachexia), and musculoskeletal dysfunction. Rehabilitation issues specific to patients with breast, lung, colorectal, and other cancers will be addressed.

**Course Structure:** One three (3) hour lecture per week, for 13 weeks. One practical laboratory session will take place during the term. The knowledge acquired throughout the course will be applied in a laboratory evaluative session at the Simulation Center.

This course will be offered to students 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.

**Learning Objectives:** With attendance and active participation in class, the student will be actively engaged in developing the following core competencies as they relate to the roles for physiotherapists<sup>1</sup> in the context of the practice of physiotherapy with people with cancer either during or after their treatments,

**Expert**

1. Understand the cancer pathology and treatment: Staging, growth, metastasis, and treatment protocols.
2. Differentiate the various goals and phases of cancer rehabilitation according to the cancer trajectory: restorative, adaptive, and palliative treatment interventions. New emerging directions.
3. Apply the challenges associated with breast cancer and its treatments: post-operative management (partial and total mastectomies with axial node dissections), post-reconstruction rehab protocols (tram-flap procedures, prosthetic replacements), management of lymphedema, radiation fatigue, and chemotherapy-induced neuropathies.
4. Describe the challenges associated with lung cancer and its treatment: control of pain, dyspnea, breathing pattern abnormalities, developmental scoliosis, fatigue and muscle loss.
5. Recognize the challenges associated with rehabilitation following head and neck surgery and reconstruction.
6. Explain strategies for the management of radiation fibrosis, amputations and reconstructions.
7. Summarize strategies for the management of cancer fatigue: Exercise protocols, management of sleep disturbances.
8. Differentiate strategies for the management of cancer pain: determine the cause of pain, management accordingly.
9. Summarize strategies for the management of cancer cachexia: Multidisciplinary interventions including nutritional supplementation, resistance exercise training, and psychological support.
10. Recognize strategies for the management of pelvic floor impairments: Causes as an effect of diseases or treatments, assessment and treatment approaches.
11. Describe the use of biophysical modalities in patients with cancer: Guidelines for use based upon the stage of disease and physiological mechanisms underlying their effectiveness
12. Understand strategies to ensure the psychosocial well-being in people at terminal stages of cancer.
13. Interpret and execute the evaluation and overall treatment of quality of life in patients undergoing treatment for cancer during different stages of disease progression

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<sup>1</sup> Essential Competency Profile for Physiotherapists in Canada, October 2009.

### **Communicator**

1. Demonstrate effective and appropriate verbal, nonverbal, and written communications to be applied when interacting with people with cancer and their families, with other health care professionals and peers when appropriate.

### **Collaborator**

1. Establish and maintain respectful and effective interprofessional relationships during group assignments and presentations
2. Understand the role of interprofessional practice in cancer rehabilitation (during group assignments, presentations, and during lecture by other health care professionals)

### **Advocate**

1. Identify the health needs and concerns of individual patients with cancer and their families, of populations, and communities, as well as understand professional responsibility in responding to those needs.

### **Scholarly practitioner**

1. Use appropriate research methods to appraise evidence of rehabilitation interventions in oncology during the poster assignment;
2. Use appropriate research methods to further advance his/her knowledge in oncology rehabilitation (appraise evidence; consult evidence-based websites and resources; etc.)
3. Identify available research evidence or sound theoretical background supporting the selected interventions or propose a method to determine effectiveness of an intervention for an individual person with cancer.

### **Professional**

1. Demonstrate a professional and respectful attitude when interacting with patients with cancer, their families, as well as their peers, and other professionals involved in the course
2. Recognize and be guided by the scope of practice of oncology rehabilitation.

## **Instructional Methods:**

- Lecture: didactic lecture with assigned readings and power point presentations available through MyCourses.
- Practical classes and clinical reasoning activities: hands-on skills laboratories based on case histories to promote clinical reasoning, and requiring advance preparation by students. Attendance is compulsory.
- Student self-directed learning: readings, reviewing and appraising evidence on selected topics.

## **Student Assignment and Evaluation:**

Student evaluation will be done in an ongoing format throughout the term.

Mark distribution:

### Case-based assignment – 25%

There will be a case-based assignment. Students will be working in their assigned groups. Groups will be expected to submit both a written and an oral report of the assignment.

### Poster presentations – 25%

Students will be working in their assigned groups. Groups will choose a published article in cancer oncology among a pre-selected list and will be expected to disseminate to the rest of the group it in a poster format.

### Simulation center session - 15%

An evaluative laboratory session will take place at the Simulation center, where students will be expected to integrate the knowledge acquired in this and previous courses.

### Final examination – 35%

The final examination is a written examination that will take place during the university final examination period. This exam will include both short and multiple choice answers.

A detailed description of these evaluations will be provided throughout the course of the semester.

**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:** [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](#).

**Dress Code:** Appropriate clothes (i.e. 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 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, 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 514-398-6009 before you do this.