

POTH 637 CURRENT TOPICS IN REHABILITATION
Cancer Rehabilitation

Credits: 3

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

Course Coordinator and Primary Instructor:

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Guest lecturers: Marize Ibrahim, MSc; Claudia Brown PT; Nelda Swinton CN; Dr. Heather Lambert, PhD MSc OT.

Course Description: This course will give the student a basic overview of cancer pathology, risk stratification, medical treatment options and rehabilitation needs throughout the disease trajectory. Rehabilitation approaches to maximize the functional status of cancer patients and survivors throughout the treatment trajectory will be revised, with particular emphasis on cancer-related fatigue and pain, bone metastases, cachexia, lymphedema, radiation fibrosis, cognition and neurological impacts, and musculoskeletal dysfunction. Rehabilitation issues specific to patients with breast, lung, colorectal, CNS, and other cancers will be addressed. A full lecture will be dedicated to holistic care and palliative care perspectives in rehabilitation.

Course Structure: One three (3) hour lecture per week, for 13 weeks. Two practical laboratory sessions 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 and Students enrolled in the Graduate Diploma in Oncology. An interdisciplinary biopsychosocial approach to management of dysfunction in patients with a diagnosis of cancer will be emphasized. Invited speakers from within the McGill community of with experience in oncology 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.

Student 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 physiotherapists¹ in the context of the practice of physiotherapy with people with cancer either during or after their treatments.

¹ NPAG Competency Profile for Physiotherapists in Canada, October 20.

This course will cover essential competencies and milestones related to the domains of **Physiotherapy Expertise, Communication, Collaboration, Management, Leadership, Scholarship**, and Professionalism. Upon completion of this course, the student will be able to:

| Learning objectives | Milestones |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Understand the cancer pathology and treatment: Staging, growth, metastasis, and medical treatment approaches</p> | <p>1.1.1, 1.1.6, 1.2.1, 1.2.3, 1.3.1, 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.5.1- 1.5.7- 1.6.4; 1.7.1; 3.1.1, 3.2.1, 3.2.3, 3.3.1-3.3.5, 5.1.1, 5.1.3, 6.1.1, 6.1.2, 6.1.4, 6.1.5, 6.4.1; 6.5.1</p> |
| <p>2. Differentiate the various goals and phases of cancer rehabilitation according to the cancer trajectory: restorative, adaptive, and palliative treatment interventions. New emerging directions.</p> | <p>1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.4.5-1.4.6; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 5.3.1, 5.3.2, 6.1.1, 6.1.2, 6.4.1; 7.3.1, 7.3.2, 7.4.1; 7.4.5, 7.4.6, 7.5.1</p> |
| <p>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), radiation fatigue, and chemotherapy-induced neuropathies.</p> | <p>1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6</p> |

| Learning objectives | Milestones |
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| 4. Describe the challenges associated with lung cancer and its treatment: control of dyspnea, breathing pattern abnormalities, developmental scoliosis, fatigue and muscle loss. | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 5. Describe the challenges associated with gastrointestinal cancer and its treatment | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 6. Recognize the challenges associated with CNS cancers and neurological impacts after cancer treatment | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 7. Describe the challenges and management of lymphedema following cancer treatment and nodes resection | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |

| Learning objectives | Milestones |
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| 8. Explain strategies for the management of bone metastases, radiation fibrosis, amputations and reconstructions. | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.4; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.3; 4.3.4- 4.3.6; 5.1.1- 5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 9. Summarize strategies for the management of cancer-related fatigue: energy and sleep disturbances management. | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 10. Differentiate strategies for the management of cancer - related pain: determine the cause of pain, management accordingly. | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 1.6.4; 4.2.4- 4.3.2; 4.3.4- 4.3.6; 5.1.1- 5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 11. Summarize strategies for the management of cancer cachexia: Multidisciplinary interventions including nutritional supplementation, resistance exercise training, and psychological support | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 3.1.1-3.3.5; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |

| Learning objectives | Milestones |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12. Recognize strategies for the management of pelvic floor impairments: Causes as an effect of diseases or treatments, assessment and treatment approaches. | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 3.1.1-3.3.5; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 13. 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 | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 14. Describe the use of exercise prescriptions in patients with cancer: Guidelines for use based upon the stage of disease and physiological mechanisms underlying their effectiveness | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6 |
| 15. Understand strategies to ensure the psychosocial well-being in people at terminal stages of cancer. | 1.1.1-1.2.4; 1.3.1-1.3.4; 1.3.6-1.4.4; 1.5.1-1.5.3; 1.5.5-1.6.1; 3.1.1-3.3.5; 4.2.4-4.3.2; 4.3.4-4.3.6; 5.1.1-5.1.3; 6.4.1; 7.4.1; 7.4.5, 7.4.6, 7.5.1 |
| 16. Interpret and execute self-reported assessments and overall treatment of quality of life in patients undergoing treatment for cancer during different stages of disease progression | 1.3.7, 2.4.2, 4.4.3 |

| Learning objectives | Milestones |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 17. Establish professional, effective, and respectful verbal, nonverbal, and written communications when interacting and establishing rapport with people with cancer, their families, and interprofessional peers | 2.1.1-2.2.2; 2.3.1-2.3.5; 3.1.1-3.3.5; 4.4.1-4.4.3 |
| 18. Understand the role of interprofessional practice in cancer rehabilitation | 5.1.1-5.3.3; 7.4.1-7.5.2 |
| 19. Use appropriate research methods to identify, appraise and further evidence supporting the effectiveness of rehabilitation interventions in oncology | 6.1.1-6.2.6; 6.3.1-6.3.2; 6.4.1; 6.5.1 |
| 20. Advocate the scope of practice of oncology rehabilitation and research | 5.1.1-5.3.3; 6.5.1-6.5.4; 7.3.1-7.3.2; 7.4.1; 7.4.5-7.4.6 |

Course Content:

Course Materials:

- **Required text:** *None*
- **Additional readings:** Research manuscripts and relevant articles will be posted with the course content on *MyCourses*

Copyright of course materials: 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 | Value | Due Date | Milestones Assessed |
|--------------------------|-------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Case-based assignment | 25% | 7-Oct-2019 | 1.1.2-1.2.4; 1.3.1-1.3.3; 1.3.6-1.6.4; 2.1.1-2.2.1; 2.3.1-2.3.5; 3.3.1-3.3.5; 4.2.4-4.3.6; 4.6.4; 5.1.1- 5.1.3; 6.1.1; 6.3.1; 6.4.1 |
| Manuscript presentations | 30% | 2-Dec-2019 | 6.1.1-6.2.6; 6.4.1 |

| Assignment/Evaluation | Value | Due Date | Milestones Assessed |
|------------------------------------------|-------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Simulation Center Laboratory Sessions | 15% | 25-Nov-2019 | 1.1.2-1.2.4; 1.3.1-1.3.3; 1.3.6-1.6.4; 2.1.1-2.2.1; 2.3.1-2.3.5; 3.3.1-3.3.5; 4.2.4-4.3.6; 4.6.4; 5.1.1- 5.1.3; 6.1.1; 6.3.1; 6.4.1; 7.1.3; 7.2.3; 7.4.1-7.4.7 |
| Final Examination | 30% | 20-Dec-2019 | 1.1.2-1.2.4; 1.3.1-1.3.3; 1.3.6-1.6.4; 2.1.1-2.2.1; 2.3.1-2.3.5; 3.3.1-3.3.5; 4.2.4-4.3.6; 4.6.4; 5.1.1- 5.1.3; 6.1.1; 6.3.1; 6.4.1; 7.1.3; 7.2.3; 7.4.1-7.4.7 |

Student evaluation will be done in an ongoing format throughout the term. A detailed description of these evaluations will be provided throughout the course of the semester.

*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:

Attendance: Attendance to course lectures, labs, and assessments is mandatory.

Plagiarism/Academic Integrity: McGill University and the Faculty of Medicine 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 Code of Conduct](#).

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](#).

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.

“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.

Dress Code: Students are expected to demonstrate professional behaviour and wear appropriate attire at all times, in accordance with clinical sites specific regulations.

Technology in Class: Your respectful attentive presence is expected, therefore while you are permitted to use your laptop in class, it is understood that you will not be using your laptop or cell phone for social purposes during class time (e.g. email, msn, sms, social media). Your cell phone should be on silent during class time and phone calls should only take place during the break or after class.

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.

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 [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.