

PHTH 550 PHYSICAL THERAPY ORTHOPEDIC MANAGEMENT

- Credits:** 7
- Prerequisites:** Successful completion of all U2 courses or admitted to the qualifying year of PT program
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Course Description: This course is the first in a series of three, where an integrated approach is used to provide the students with the necessary competencies to familiarize them with common musculoskeletal conditions and provide them with Physical Therapy skills for evaluation and treatment.

Course Structure:

Weekly:

2.5-hour lecture

Two 4.5-hour combined clinical skills labs & clinical reasoning workshops (CRW)

General Learning Outcomes: On completion of this course, the student will be able to evaluate and treat clients with previously diagnosed conditions affecting the musculoskeletal system, using an evidence-informed approach.

Course Content:

Topics include, but are not limited to:

- a. Anatomy and biomechanics of the musculoskeletal and peripheral nervous systems, including surface anatomy and palpation
- b. Psychometric properties of assessment tools
- c. Principles and stages of wound healing in relation to rehabilitation goals
- d. Introduction to pain concepts
- e. Patient interviewing & charting (SOAP/PIER format)
- f. Principles of exercise testing and prescription
 - i. Aerobic / Cardio-respiratory
 - ii. Resistance (for strength, power, local muscle endurance)
 - iii. Flexibility
 - iv. Balance & Proprioceptive

- g. Gait assessment and training*
 - i. Mobility aids
- h. Patient transfers and mobilization‡
 - i. Following lower limb arthroplasty
 - ii. Precautions and contraindications
- i. Postural assessment*
 - i. Positional / postural control
 - ii. Alignment of body segments
- j. Swelling assessment
- k. Principles of joint assessment
 - i. Range of motion (including goniometry)
 - ii. Strength (including resisted isometric and manual muscle testing)
- l. Aetiology, epidemiology, pathophysiology and management of:
 - i. Fractures
 - ii. Arthroplasties
 - iii. Lower Limb Amputations
 - iv. Osteoarthritis†
 - v. Rheumatoid Arthritis and other Rheumatic Diseases
 - vi. Burns
 - vii. Cutaneous Wounds
- m. Pharmacological management of the conditions above:
 - i. Classes of medication
 - ii. Principal and side effects of medication
 - iii. Relevance to physiotherapeutic management
- n. Biophysical agents*
 - i. Therapeutic ultrasound (theory and practical labs)
 - ii. Thermal modalities (theory)
 - iii. Biophysical agents and wound healing (theory)
- o. Promoting patient self-efficacy
- p. Principles of massage and soft tissue mobilisations
 - i. Basics massage principles and techniques (for Qualifying Year students and Foreign trained students only)
 - ii. Deep transverse frictions

*Topic will overlap with PHTH 551

†Topic will be introduced, with additional information presented in PHTH 560 and PHTH 623.

‡Topic will overlap with POTH 563

Specific Learning Outcomes based on Essential Competencies & Entry-to-Practice Milestones:

Following attendance and active participation in lectures, labs, CRW and clinical site visits, the student will begin to demonstrate the following essential competencies for physical therapy practice, for a clientele with previously diagnosed conditions affecting the musculoskeletal system. The student will also have progressed toward the following entry-to-practice milestones, in the context of the topics discussed in this course.

Physiotherapy Expertise:

- Employ a client-centered approach.
 - Act in a manner that respects client uniqueness, diversity and autonomy, and is in the client's best interest.
 - Provide the client with relevant information throughout care.
 - Actively involve the client in decision-making.
 - Empower client to engage in his / her own care.
 - Build and maintain rapport and trust with the client.
 - Ensure ongoing, informed client consent.
- Ensure physical and emotional safety of client.
 - Identify client-specific precautions, contraindications and risks.
 - Employ safe client handling techniques.
 - Apply assessment and intervention procedures in a manner that enhances the client's safety and comfort.
 - Monitor and respond to client's physical and emotional state throughout care.
 - Identify and respond to near misses and adverse events.
- Conduct client assessment.
 - Interview client to obtain relevant information about health conditions, and personal and environmental factors.
 - Determine client's expectations, and their relevance to physiotherapy.
 - Identify comorbidities that impact the approach to assessment.
 - Identify urgent health conditions that require immediate attention and take appropriate action.
 - Identify non-urgent health-related conditions that may benefit from referral to other services, and advise client accordingly.
 - Select and perform appropriate tests and measures.
- Establish a physiotherapy diagnosis and prognosis.
 - Interpret assessment findings and other relevant information.
 - Identify client's body structure and function impairments, activity limitations and participation restrictions.
 - Develop a physiotherapy diagnosis.
 - Develop a working prognosis.

- Determine if physiotherapy is indicated.
- Determine if referral to another physiotherapist or another provider is indicated.
- Develop, implement, monitor and evaluate an intervention plan.
 - Establish physiotherapy short and long-term client-centered goals.
 - Determine an intervention plan.
 - Implement planned interventions.
 - Assist client to develop self-management skills.
 - Monitor and respond to client status during interventions.
 - Reassess client status and needs as appropriate.
 - Modify intervention plan as indicated.
- Complete or transition care
 - Evaluate client outcomes and goal attainment.
 - Develop a discharge or transition of care plan.

Communication

- Use oral and non-verbal communication effectively.
 - Speak clearly and concisely.
 - Listen actively, to build trust and foster exchange of information.
 - Use and respond to body language appropriately.
 - Give and receive feedback in a constructive manner.
- Use written communication effectively.
 - Write in a clear, concise and organized fashion.
 - Ensure written communication is legible.
 - Prepare comprehensive and accurate health records and other documents, appropriate to purpose.
- Adapt communication approach to context.
 - Adjust communication strategy consistent with purpose and setting.
 - Use appropriate terminology.
 - Adjust communication based on level of understanding of recipient.
 - Share information empathetically and respectfully.
- Use communication tools and technologies effectively
 - Use electronic technologies appropriately and responsibly.
 - Use images, videos and other media to enhance communication.

Collaboration

- Promote an integrated approach to client services.
 - Identify practice situations that may benefit from collaborative care.
 - Engage client as a team member.
- Contribute to effective teamwork.
 - Respect accepted principles for teamwork.

- Participate in shared leadership.
- Share relevant information with the team.
- Participate and be respectful of all members' participation in collaborative decision-making.

Management

- Utilize resources efficiently and effectively.
 - Provide services that balance client needs and available resources.
 - Manage own time effectively.
 - Address issues related to availability of equipment and supplies.
- Ensure a safe practice environment.
 - Identify risks and mitigate hazards in the workplace.
 - Apply best practices for infection control.

Scholarship

- Use an evidence-informed approach in practice.
 - Incorporate best available evidence into clinical decision-making.
 - Incorporate client context into clinical decision-making.
 - Incorporate personal knowledge and experience into clinical decision-making.
 - Make decisions using an established clinical reasoning framework.
- Integrate self-reflection and external feedback to improve personal practice.
 - Seek feedback from others on personal performance and behaviour.
 - Compare personal performance and behaviour with professional and organizational expectations.
 - Identify learning needs based on self-reflection and external feedback.
 - Develop and implement a plan to address learning needs.
- Contribute to the learning of others
 - Identify the physiotherapy-related learning needs of others

Professionalism

- Behave ethically.
 - Use an ethical framework to guide decision-making.
 - Promote services in an ethical manner.
- Embrace social responsibility as a health professional.
 - Maintain awareness of issues and advances affecting the health system locally, nationally and globally.
 - Demonstrate awareness of the social determinants of health and emerging trends that may impact physiotherapy practice.
- Act with professional integrity.
 - Behave with honesty and respect for others.
 - Behave in a manner that values diversity.

- Work within physiotherapy scope of practice and personal level of competence.
- Accept accountability for decisions and actions.
- Maintain professional deportment.
- Maintain professional boundaries.
- Respond constructively to changes affecting the workplace.
- Maintain personal wellness consistent with the needs of practice.
 - Balance personal and professional demands.
 - Address physical, emotional and psychological factors negatively impacting workplace performance.

Course Materials:

1. Biel A. (2010) *Trail guide to the body* (4th Edition), Books of Discovery, Boulder, CO.
2. Kisner C. and Colby L. (2012), *Therapeutic exercise: Foundations and techniques* (6th Edition), F.A. Davis, Philadelphia, PA.
3. Course pack - by McGill Ancillary Services

Reference Texts:

1. Magee D.J. (2014). *Orthopedic Physical Assessment* (6th edition), Saunders (Elsevier), St. Louis, MO
2. Van Ost L. (2010) *Cram session in goniometry: A handbook for students & clinicians*, Slack Inc., Thorofare, NJ.
3. Brotzman S. and Wilk K. (2007), *Handbook of orthopaedic rehabilitation* (2nd Edition), Mosby (Elsevier), Philadelphia, PA
4. Kendall F., McCreary E., Provance P., Rodgers M. and Romani W. (2005), *Muscles: Testing and function with posture and pain* (5th Edition), Lippincott Williams and Wilkins, Philadelphia, PA

Copyright: 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	Description	%
Assignments	Five (5) formative exercise programs.	5%
	Final group exercise program.	5%
Mid-term evaluation	Written; multiple choice and short answer format.	25%
	Objective Structured Clinical Examination (OSCE)	15%
Final evaluation	Written; multiple choice and short answer format.	30%
	Objective Structured Clinical Examination (OSCE)	20%

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:

For U3 students, in order to pass the course, a grade of at least C+ (60%) must be obtained as a total course mark. For QY students, 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 both undergraduate and graduate calendars on University regulations regarding final and supplemental examinations.

This course falls under the regulations concerning theoretical and practical evaluation as well as individual and group evaluation. Please refer to the section on marks in the Rules and Regulations for Student Evaluation and Promotion of the Physical Therapy Course Guides.

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](#).

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](#).

Dress Code: Professionalism with respect to dressing is encouraged throughout the course of the semester. It is each student's responsibility to have appropriate attire during all class assignments and learning activities.

Attendance: Students who have missed more than 15% of laboratory or small group sessions, or who miss any required professional workshop or seminar, without prior approval, will receive 0/10 for participation in the course. If a course does not have a participation mark, then the final course mark will be deducted by a 10% mark. This rule applies to labs and to all required workshops, seminars or professional activities.

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.

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.

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). Your cell phone should be on silence during class time and phone calls should only take place during the break or after class.