

## PHTH 661 SPORT PHYSIOTHERAPY

**Credits:** 3

**Prerequisites:** Successful completion of PHTH 623 Differential DX and Management.

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**Course Description:** This three-credit lecture/CRW/laboratory course is designed for physical therapy master's students as part of the professional complementary course. The students will learn effective and evidence-informed assessment and treatment techniques for the management of athletes as part of an interdisciplinary approach.

**Course Learning Outcomes:** The student will be developing the following core competencies as they relate to the roles for physiotherapists<sup>1</sup> in the context of the practice of sport physiotherapy:

### Expert

1. Understand training principles and sport-specific demands using evidence-informed practice.
  - a. Understand the basic principles of periodization of training.
  - b. Contrast the basic principles and demands of aerobic, anaerobic, strength, power and flexibility training in the context of sport physiotherapy.
  - c. Explain the biomechanics of different sports and identify potential sport-specific injuries.
  - d. Recognize and prevent situations that can result in acute or chronic injuries during the activity/sport.
  - e. Recognize and prevent athletic burnout and overtraining.

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

2. Evaluate and manage injured athletes of all ages and sports according to evidence-informed practice.
  - a. Explain the common pathologies encountered by the sport therapist.
  - b. Perform emergency care procedures and on-field assessments and interventions.
  - c. Evaluate injured athletes with a wide range of acute and chronic sporting conditions.
  - d. Develop clinical impressions using clinical reasoning skills.
  - e. Develop care plans based on the assessment findings, knowledge of anatomy, biomechanics, phases of healing and sport-specific demands.
  - f. Execute sport-specific interventions according to the plan of care and prevent further injuries.
  - g. Monitor effectiveness of care and readiness to return to play via periodic reassessments and modifications of the plan of care.
  - h. Understand the psychological factors impacting on injury and injury rehabilitation.
  - i. Identify when referral or consultation with other professional(s) is necessary for proper management of the athletes.

### Communicator

3. Demonstrate effective and appropriate verbal and nonverbal communications in the context of sport physiotherapy while promoting respect and ethical principles.

### Collaborator

4. Explain the role of an interdisciplinary approach for the overall management of healthy and injured recreational or elite athlete.
  - a. Identify the roles and issues of the sport therapist within the sports medicine team.
  - b. Describe the roles of the other members of the sport medicine team.
  - c. Understand the importance of promoting interprofessional approaches in the management of the athletes.
  - d. Identify situations where the sport therapist may play leadership roles in the management of the athletes.

### Manager

5. Describe the steps and actions required to organise the medical aspect of a sporting event.
6. Demonstrate safe and effective sport-specific assessments and interventions.

### Advocate

7. Identify sport-specific needs of athletes and design sport-specific pre-season evaluations in order to develop and promote injury prevention strategies.

### Scholarly practitioner

8. Identify and critically evaluate research evidence on sport-specific conditions, evaluation and interventions strategies.

### Professionalism

9. Recognize the importance of adhering to ethical and professional regulations in the context of sport physiotherapy.

**Course Content:** Topics include: sport medicine team approach, training principles, biomechanics of sports, injury prevention, protective equipment, emergency action plan, on-field emergency care, taping, splinting, sporting conditions and their management, return to play, sport massage, sport nutrition and sport psychology.

More specifically, on-field conditions topics include but are not limited to:

- Respiratory & cardiac conditions
- Bleeding & soft tissue injuries
- Shock
- Acute musculoskeletal conditions
- Head & spinal trauma
- Thoracic & abdominal conditions
- Sudden illnesses/ Medical conditions
- Infections and skin conditions
- Environmental conditions

**Instructional Methods:** Lecture, case/problem-based approach, small group discussion and clinical skills labs will all be used to a varying degree while emphasizing evidence-informed practice, clinical reasoning and an interdisciplinary approach in the overall management of the athletes. The course comprises of 7 hours per week for 8 weeks (subject to change).

**Course Materials:**

**Required readings**

- 1- McCrory et al (2013). Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport held in Zurich, November 2012. British Journal of Sports Medicine, 47, 250-258:  
<http://bjsm.bmj.com/content/47/5/250.full>
- 2- ACSM, ADA, DC joint position statement (2009). Nutrition and athletic performance, Medicine & Science in Sports & Exercise, 41, 3, pp. 709-731:  
[http://journals.lww.com/acsm-msse/Fulltext/2009/03000/Nutrition\\_and\\_Athletic\\_Performance.27.aspx](http://journals.lww.com/acsm-msse/Fulltext/2009/03000/Nutrition_and_Athletic_Performance.27.aspx)
- 3- Rosenbloom C (2001). Chapter 22: Nutritional considerations during injury and rehabilitation (pp. 339-352), Sports Nutrition 3<sup>rd</sup> edition, WileyBlackwell.

**Recommended texts**

- 1- Brukner P and Khan K (2012). Clinical Sports Medicine 4th edition, McGraw Hill.
- 2- Hewetson T, Austin K, Gwynn-Brett K, Marshall S (2010). Illustrated Guide to Taping Techniques 2<sup>nd</sup> edition, Mosby, Elsevier.

**Student Assignment and Evaluation:**

Assignment/Evaluation	%
Quiz	10%
Student presentations	25%
Final written exam	35%
Final practical exam	30%

**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. 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 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.

**Plagiarism/Academic Integrity:** "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 (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information.)

"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 (pour de plus amples renseignements, veuillez consulter le site [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/))."

**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. When working with clients or simulated patients, student must be dressed professionally.

**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.

**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.