

PHTH 661 SPORT PHYSIOTHERAPY

Credits: 3

Prerequisites: Registered in PHTH 623 Differential Diagnosis and Management

Instructors: Isabelle Pearson PT, MSc, Cert. MDT, RISPT, Dip. Sport PT (Course

Coordinator/Instructor)

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Office hours by appointment (virtual or in-person on a case by case basis)

Tiffany Hunting PT, MSc, FCAMPT, RISPT, Dip. Sport PT (Lab instructor)

Julie Gardiner, PT, Dip. Sport PT (Lab instructor)

Additional clinician(s) may also participate as lab instructor(s)

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 Structure: Lectures, case 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. In general, on a weekly basis (subject to change), the course comprises of (refer to MyCourses for more details regarding weekly schedule):

- 1.5- to 3-hour of in-person lecture (on average 1.5 hours weekly)
- Two 1.5- to 3-hour of in-person clinical skills labs (on average, 4.5 hours weekly)
- 0 to 3-hour of in-person clinical reasoning workshops (CRW) and student presentations
- Note that some lectures and case discussion may be exceptionally done remotely in a fixed and/or flexible format

Note that the number of hours may vary from one week to another and at times could be more or could be less than what is listed above. Course schedule details will be posted at the beginning of the term on MyCourses.

Open labs will be scheduled based on approval from the School direction, the availability of instructors and facilities as per students' request.



Instructor message regarding remote delivery: I acknowledge that the mixed remote learning and in-person context due to the pandemic presents challenges for all involved, and I am committed to do my best to provide a supportive learning environment for all students.

Student Learning Objectives: 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 | | |
|--|---------------|--|
| 1. Understand training principles and sport-specific demands using evidence- | 6.1.1 | |
| informed practice. | | |
| a. Understand the basic principles of periodization of training. | 6.1.1 | |
| b. Contrast the basic principles and demands of aerobic, anaerobic, strength, | 6.1.1 | |
| power and flexibility training in the context of sport physiotherapy. | | |
| c. Explain the biomechanics of different sports and identify potential sport- specific injuries. | 6.1.1 | |
| - | 4.3.1 | |
| d. Recognize and prevent situations that can result in acute or chronic injuries during activity/sport | 4.5.1 | |
| e. Recognize and prevent athletic burnout and overtraining. | 4.3.1 | |
| 2. Evaluate and manage injured athletes of all ages and sports according to | 6.1.1 | |
| evidence-informed practice. | | |
| a. Explain some pathologies encountered by the sport therapist. | 6.1.1 | |
| b. Perform emergency care procedures and on-field assessments and | 1.1.3.1, | |
| interventions. | 1.3.3 to | |
| | 1.3.7, 1.4.1, | |
| | 1.4.3 to | |
| | 1.4.6, 1.5.2 | |
| | to 1.5.7, | |
| | 1.6.2 to | |
| | 1.6.4 | |
| c. Evaluate injured athletes with a wide range of acute and chronic sporting | 1.3.1 to | |
| conditions. | 1.3.7 | |
| ${ m d.}$ Develop PT diagnosis using clinical reasoning skills. | 1.4.1, 1.4.3 | |
| | to 1.4.6 | |
| e. Develop care plans based on the assessment findings, knowledge of | 1.5.2 | |
| anatomy, biomechanics, phases of healing and sport-specific demands. | | |
| f. Execute sport-specific interventions according to the plan of care and prevent further injuries. | 1.5.3, 1.5.4 | |
| g. Monitor effectiveness of care and readiness to return to play via assessments such as return to play test battery. | 1.5.5, 1.5.6 | |



| Lea | arning objectives | Milestones | | |
|-----|--|---------------------------|--|--|
| | ${ m h.}$ Understand the psychological factors impacting on injury and injury rehabilitation and how to monitor and respond to them. | 1.2.4 | | |
| | ${f i.}\;$ Identify when referral or consultation with other professional(s) is necessary | <u> </u> | | |
| | for proper management of the athletes. | 3.2.1 | | |
| 3. | Identify sport-specific needs of athletes and design sport-specific pre-season | 4.3.1, 6.1.1, | | |
| | evaluations in order to develop and promote injury prevention strategies. | 6.1.2 | | |
| 4. | 4. Demonstrate effective and appropriate verbal and nonverbal communications | | | |
| | in the context of sport physiotherapy while promoting respect and ethical | 2.1.3, 2.2.1 | | |
| | principles. | 2.2.3, 2.3.1 | | |
| | | to 2.3.3, | | |
| | | 2.4.3, 4.6.1, | | |
| | | 4.6.2, 4.6.4, | | |
| | | 7.1.3, 7.2.3, | | |
| | | 7.4.1 | | |
| 5. | Explain the role of an interdisciplinary and client-centered approach for the | 1.1.1 to | | |
| | overall management of healthy and injured recreational or elite athlete. | 1.1.6, 3.1.1, | | |
| | | 3.1.2 | | |
| | a. Identify the roles and issues of the sport therapist within the sports medicine team. | 1.4.5 | | |
| | b. Describe the roles of the other members of the sport medicine team. | 3.1.2, 3.2.1, | | |
| | | 3.2.3, 3.2.4 | | |
| | c. Understand the importance of promoting interprofessional approaches | 3.2.1, 3.2.4, | | |
| | and client-centredness in the management of athletes | 3.3.1, 5.1.3 | | |
| | $d. \;\;$ Identify situations where the sport therapist may play leadership roles in the management of the athletes. | 3.3.2 | | |
| 6. | Describe the steps and actions required to organise the medical aspect of a | 4.1.2, 4.2.1, | | |
| | sporting event and within the context of traveling with a team. | | | |
| | | 4.2.4, 4.3.2 to 4.3.4, | | |
| | | 4.3.6, 4.5.1, | | |
| | | 4.5.2, 4.6.1, | | |
| | | 4.6.2, 4.6.4, | | |
| | | 7.5.1 | | |
| 7. | Demonstrate safe and effective sport-specific assessments and interventions. | 1.2.1 to | | |
| | · | 1.2.5, 4.3.4, | | |
| | | 4.3.6 | | |
| 8. | Identify and critically evaluate research evidence on sport-specific conditions, | 6.2.3, 6.2.4 | | |
| 0 | evaluation and interventions strategies. | 242652 | | |
| 9. | Contribute to the education of peers in the context of sport physiotherapy. | 2.4.3, 6.5.2 | | |



| Learning objectives | Milestones |
|---|---------------|
| 10. Recognize the importance of adhering to ethical and professional regulations in | 7.1.1 to |
| the context of sport physiotherapy. | 7.1.3, 7.2.2, |
| | 7.2.3, 7.4.3, |
| | 7.4.6 |

Instructional Method:

All class material will be posted either on MyCourses or on Microsoft Stream.

Lectures will be taught in-person or remotely if needed (subject to change). Clinical skills labs will be practiced during in-person labs at the School of Physical and Occupational Therapy. Videos of the clinical skills labs will be posted on Microsoft Stream (app of Microsoft Outlook accessible to all McGill students in their McGill Outlook account on the web). Class activities related to the lectures as well as clinical reasoning workshops will be delivered in-person (subject to change).

Polling may be used at times during this course during remote classes. Polling may be done via the polling system integrated in Zoom or via the official McGill polling system called slido. When used in the course, polling will be used to enhance students' engagement and increase interaction in the class.

- During a class with polling questions, you will respond to questions from the instructor from a personal device (smartphone, tablet, or laptop).
- Students should come to class with their devices charged and connected to the Internet.
- Polling will be available through www.slido.com
- To participate in Polling sessions, you MUST log in with your McGill username and password via the log in with Webex option. For more information, please visit www.mcgill.ca/polling.
- For any technical problems with polling, please contact the IT Service Desk: http://www.mcgill.ca/it/get-started-it/need-help.
- If you do not have a phone, tablet, or laptop to use to respond to polling questions, please contact the instructor immediately such that appropriate arrangements can be made.
- To maintain a safe and respectful classroom environment, please ensure that any polling responses you submit are appropriate and relevant to the question asked. Please note that unless the poll is labelled as anonymous, your responses are identifiable to the instructor. Please see the Code of Student Conduct and Disciplinary Procedures.



Expectations for Student Participation: All students are expected to attend in-person lecture and prepare any related material (readings, videos, flexible lectures) prior to the lectures. When necessary, students are also expected to watch pre-recorded lectures or attend fixed remote lectures. All students are also expected to attend all in-person labs unless they receive prior approval from the course coordinators or have a University accepted reason for not participating in a specific lab (refer to Attendance policy below). Although videos will be shown in class or live demonstration will be done in class, students are strongly encouraged to watch pre-recorded lab videos prior to their respective in-person labs. Students are also expected to attend any remote mandatory fixed sessions on Zoom. During Zoom's fixed remote session, students are expected to participate via the chat when the chat is open for questions or click on the "Raise Hand" sign when discussion are done with the whole class. Although not mandatory, students are strongly encouraged to turn on their videos during small groups discussions and breakout rooms of clinical reasoning workshops. All students are expected to participate during the small group discussion in breakout rooms. All students are expected to adhere to the instructors' class conduct/instructions during remote online fixed sessions. During in-person clinical reasoning workshops, all students are expected to attend and participate in the discussion. Attendance will be taken for all in-person labs, in-person clinical reasoning workshops and all remote online mandatory fixed sessions. When offered, office hours will be optional.

Recording of Sessions: Please read the Guidelines on Remote Teaching and Learning [https://www.mcgill.ca/tls/instructors/class-disruption/strategies/guidelines-remote] and the course outline for this course in myCourses. You will be notified through a 'pop-up' box in Zoom if a lecture or portion of a class is being recorded. By remaining in sessions that are recorded, you agree to the recording, and you understand that your image, voice, and name may be disclosed to classmates. You also understand that recordings will be made available in myCourses to students registered in the course. Some remote mandatory fixed sessions will be recorded and posted on MyCourses. Office hours and CRW will not be recorded unless otherwise specified. In-person labs may be recorded in one of the lab room when at least one student in the class cannot attend the lab because of COVID-19 related reasons. Otherwise, labs will not be recorded.

Course Content: The course consists of three main blocks with some additional topics related to Sport Physiotherapy. The three main blocks are taping, on-field assessment and interventions and clinical sport physiotherapy, each comprised approximately one third of the course content. Topics include but may not be limited to: sport medicine team approach, training principles, biomechanics of sports, injury prevention, emergency action plan, on-field emergency care, taping, splinting, sporting conditions and their management, return to play, sport nutrition, sport psychology, functional movement assessment and corrections, advanced exercise prescription, Mulligan techniques, and some other clinical tests or treatment techniques. More specifically, on-field conditions topics include but are not limited to:



- Respiratory & cardiac conditions
- Bleeding & soft tissue injuries
- Shock
- Acute musculoskeletal conditions
- Head and spinal trauma
- Thoracic & abdominal conditions

Course Schedule: Will be posted on MyCourses

Course Materials:

In order to participate in this course, you will need to ensure that you have adequate access to the internet and IT devices to be able to: i) download/upload content on MyCourses, ii) stream recorded lectures and videos (MyCourses, Microsoft Stream), iii) participate in remote fixed session via Zoom when necessary, iv) participate in polling activities, v) submit students presentation and vi) write the final written exam for this course.

- Required text: None
- Required readings:
- 1. McCrory et al. (2017). Consensus statement on concussion in sport: the 5th International Conference on Concussion in Sport held in Berlin, October 2016. British Journal of Sports Medicine,51: 838-847. doi: 10.1136/bjsports-2017-097699
- 2. A list of additional required readings/videos will be posted on MyCourses.
- Recommended texts and readings:
- 1. Brukner P, Khan K et al (2017). Clinical Sports Medicine 5th edition volume 1 injuries, McGraw Hill education. On hold for the course at McGill Library.
- 2. Brukner P & Khan K (2019). Clinical Sports Medicine 5th edition volume 2 the medicine of exercise, McGraw Hill education. On hold for the course at McGill Library.
- 3. Hewetson T, Austin K, Gwynn-Brett K, Marshall S (2010). Illustrated Guide to Taping Techniques 2nd edition, Mosby, Elsevier. Available as a free ebook via the McGill library at: https://www-sciencedirect-com.proxy3.library.mcgill.ca/book/9780723434825/an-illustrated-guide-to-taping-techniques
- 4. Kumbrink B, (2014). K-Taping An Illustrated Guide Basics Techniques Illustrations 2nd edition. Springer Medizin, 247 pages. Available as a free ebook via the McGill library at: https://link-springer-com.proxy3.library.mcgill.ca/book/10.1007%2F978-3-662-43573-1



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.

Copyright of online course materials: Please note that the online format for the delivery of this course is unusual. It is explained by our current extraordinary circumstances, and aims to allow you, as students, to complete this term with the requisite knowledge for this course, and to succeed in your assessments. We ask for everyone's collaboration and cooperation in ensuring that the videos and associated material are not reproduced or placed in the public domain. This means that each of you can use the videos for your own personal purposes, but you cannot allow others to use it, by putting it up on the internet or by giving it or selling it to others who will copy it and make it available. Thank you very much for your help with this.

Student Assignment and Evaluation:

| Assignment/Evaluation | Value | Due Date | Milestones |
|------------------------|----------------|----------|------------------------|
| | | | Assessed |
| Two in-person Quizzes | 20% (10% each) | Refer to | 1.2.1, 1.3.5, 1.3.7, |
| | | course | 1.5.2, 6.1.1, 7.3.1, |
| | | schedule | 7.4.6 |
| Taping practical exam | 10% | Refer to | 1.2.2, 1.2.3, 1.5.3, |
| | | course | 1.5.5, 4.2.3, 6.1.1 |
| | | schedule | |
| Student presentations | 30% | Refer to | 2.4.3, 6.1.1, 6.2.3, |
| with submission of the | | course | 6.2.4, 6.5.2 |
| presentation, the pre- | | schedule | |
| season assessment | | | |
| form and | | | |
| biomechanical | | | |
| assessment form | | | |
| Final online written | 20% | Refer to | 1.1.1, 1.2.1, 1.3.5, |
| exam on MyCourses | | course | 1.3.7, 1.4.1, 1.4.3, |
| | | schedule | 1.5.2, 1.5.4, 1.5.5, |
| | | | 1.6.2, 6.1.1, 6.1.2, |
| | | | 7.3.1, 7.4.6 |
| Final practical exam | 20% | Refer to | 1.1.1, 1.1.2, 1.1.4, |
| (OSCE - Objective | | course | 1.1.5, 1.2.1 to 1.2.4, |
| Structured Clinical | | schedule | 1.3.1, 1.3.5, 1.3.7, |



| Assignment/Evaluation | Value | Due Date | Milestones |
|-----------------------|-------|----------|------------------------|
| | | | Assessed |
| Examination) | | | 1.4.1, 1.4.3, 1.5.2 to |
| | | | 1.5.5, 1.5.7, 1.6.2, |
| | | | 1.6.3, 2.1.1 to 2.1.3, |
| | | | 2.3.1 to 2.3.3, 4.2.1, |
| | | | 4.2.3, 4.3.4, 6.1.1, |
| | | | 6.1.2, 7.4.1, 7.4.6 |

*In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

Review of marks: Students who are dissatisfied with a mark must discuss the matter with the course instructor within one calendar week of receiving their mark. Following a discussion of the student's concerns, the instructor may decide to change their mark or leave it unchanged (please refer to the 2022-2023 SPOT Rule & Regulations document found on the SPOT website for further details).

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. This course falls under the regulations concerning individual and group evaluation. Please refer to the section on Evaluation and Promotion of the Rules and Regulations document.

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.

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 McGill University Code of Student Conduct and Disciplinary Procedures and the Faculty of Medicine and Health Sciences Code of Conduct

L'université McGill et Faculté de Médecine et des Sciences de la Santé 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</u> <u>conduite de l'étudiant et des procédures disciplinaires</u> et <u>Faculté de médecine et des sciences de</u> la santé.

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 as requested 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. 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.

*Appropriate attire must be worn during practical sessions (i.e. shorts and tank tops that allow for easy assessment of limbs being examined).

*Please adopt appropriate "hand hygiene" (regularly washing hands, clean and short fingernails) during hands-on techniques.

Professional Conduct: Professionalism and accountability are expected throughout the course of the semester. This includes the on-going respectful nature of teacher-student as well as student-student interactions.

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

Course Accessibility: As the instructor of this course, I endeavor to provide an inclusive learning environment. 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 <u>Student Accessibility and Achievement at 514-398-6009 before you do this.</u>



Equity, Diversity and Inclusion: The instructors in this course recognize the importance of equity, diversity and inclusion. We understand the various backgrounds and identities that compose this group and want to ensure that these identities are respected. If you identify yourself to a group and would like to be acknowledged a certain way, please let us know via email or in-person. If you would like us to refer to you by a different name indicated in your student record, please also let us know via email or in-person.

Mental Health: Many students may face mental health challenges that can impact not only their academic success but also their ability to thrive in our campus community. Please reach out for support when you need it; many <u>resources</u> are available on-campus, off-campus and online

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.

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.