# SUBJECT OUTLINE

**Subject Name:**

## Myotherapy for the Lower Body 1

**Subject Code:**

## MSTT211

## SECTION 1 – GENERAL INFORMATION

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| **Award/s:** | | **Total Course Credit Points:** | **Level:** | |
| | Bachelor of Health Science (Naturopathy) | 128 | Elective | 4th Year |
| | Bachelor of Health Science (Myotherapy) | 96 | Core | 2nd Year |
| **Duration:** | 1 Semester | | | |
| **Subject is:** | Core or Elective as noted | **Subject Credit Points:** | 2 | |

### Student Workload:

| **No. timetabled hours per week: 3** | **No. personal study hours per week: 2** | **Total hours per week: 5** |
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**Delivery Mode*:**

☐ **On campus** ☐ **Online / Digital** ☒ **Blended** ☒ **Intensive**

**Weekly Session^ Format/s - 1 session per week:**

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| ☒ On campus practical tutorials: | ☐ 1 hour | ☒ 2 hours | 2 hour practical session per week |
| ☒ Livestream lectures: | ☒ 1 hour | ☐ 2 hours | 1 hour lecture per week |
| ☒ Summer school – 7 weeks: | Offered in Summer School only for make-up purposes after lockdowns.<br>Delivery on campus: 2 x 3 hour sessions Weeks 1 – 6, 1 x 3 hour session Week 7.<br>Assessment Due: Attendance – Weeks 1 – 7; Range of Motion Logbook – Week 4; Final Practical Exam – Week 7; Final Written Exam – Week 7. | | |

*All modes are supported by the online learning management system which will include subject documents such as handouts, readings and assessment guides.

^A 'session' is made up of 3 hours of timetabled / online study time per week unless otherwise specified. Each subject has a set number of sessions as outlined above.

**Note:** As they are aware, international students on a Student Visa (500) must attend livestream classes on their local campus, using the Virtual Classrooms provided.

**Study Pattern:** ☒ Full Time ☒ Part Time

**Pre-requisites:** MSTA121

**Co-requisites:** Nil

**Special Resource Requirements:**

1 bath-sheet sized towel per student (Clinic towels must not be used)

Attire that allows effective palpation while acting as student model

Goniometer

Myofascial release balm and associated safety data sheet

# SECTION 2 – ACADEMIC DETAILS

## Subject Rationale

This subject aims to introduce key elements of the orthopaedic examination of the lower limb. Students will focus on postural assessment, joint range of motion testing and palpation. The student will gain valuable insight into movement (kinetics and kinematics), the anatomical structures that support movement and those which create stability. This subject will furthermore provide students with a broad understanding of myofascial trigger points, including; aetiology, history and context, diagnosis and neuromuscular treatment techniques. Students completing this subject will be able to complete a basic range of movement assessment of the lower limb, detect movement dysfunction and resolve dysfunction of trigger point origin using neuromuscular techniques.

## Learning Outcomes

1. Apply understanding of joint movement and joint mechanics.
2. Demonstrate practical competence and understanding in joint assessment techniques of the lower limb.
3. Explain the theory, clinical characteristics and neuromuscular techniques for myofascial trigger points of the lower limb.
4. Demonstrate practical application of a variety of therapeutic interventions to deactivate trigger points of the lower limb.

## Assessment Tasks

| Type | Learning Outcomes Assessed | Session Content Delivered | Due | Weighting |
|---|---|---|---|---|
| **Attendance** (80% required) | N/A | N/A | Sessions 1-12 | Pass/Fail |
| **Range of Motion Logbook** | 1-2 | 1-5 | Week 6 | 30% |
| **Final Practical Exam** (30 minutes) | 1-4 | 1-12 | Session 13 | 40% |
| **Final Written Exam** (1.5 hours) | 1-4 | 1-12 | Final Examination Period | 30% |
| All written assessments and online quizzes are due at 11:55 p.m. Sunday and submitted through the LMS | | | | |

**Prescribed Readings:**

1. Biel, A. (2015). Trail guide to movement: Building the body in motion. Books of Discovery.
2. Clarkson, H. M. (2013). Musculoskeletal assessment: Joint motion and muscle testing (3rd ed.). Wolters Kluwer Health.
3. Niel-Asher, S. (2014). The concise book of trigger points: A professional and self-help manual (3rd ed.). North Atlantic Books.

**Recommended Readings:**

1. Dommerholt, J., & Huijbregts, P. (2011). Myofascial trigger points: Pathophysiology and evidence-informed diagnosis and management. Jones and Bartlett Publishers. [ebook available]
2. Neumann, D. A. (2017). Kinesiology of the musculoskeletal system: Foundations for rehabilitation (3rd ed.). Elsevier. [ebook available]

## Subject Content

| Week | Lectures | Tutorials / Practicals |
|---|---|---|
| **1.** | **Introduction** (Subject Outline / Subject Aims / Assessment / Teaching Resources)<br>**The Joint Assessment Routine**<br>• Overview and rationale<br>• Lower limb observation and postural assessment<br>**Biomechanics**<br>• Joint movements<br>• Overview of kinematics | • Postural assessment<br>• Observation of the lower limb<br>• Joint movements of the lower limb |
| **2.** | **The Ankle and Foot**<br>• Active, passive and active resisted range of movement<br>• Length testing<br>• Palpation | • Ankle and foot assessment |
| **3.** | **The Knee**<br>• Active, passive and active resisted range of movement<br>• Length testing<br>• Palpation<br>**Formative Assessment: Range of Motion Logbook Part A due** | • Knee assessment |
| **4.** | **The Hip**<br>• Active, passive and active resisted range of movement<br>• Length testing | • Hip assessment |

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| | • Palpation | |
| **5.** | **The Pelvis**<br>• Active range of movement<br>• Palpation<br>**Validity and Reliability** | • Sacroiliac joint assessment |
| **6.** | **Biomechanics**<br>• Kinetics | • Forces and movement |
| **7.** | **Gait**<br>• Normal and abnormal gait<br>• Basic gait assessment | • Basic gait assessment |
| | **NON-TEACHING WEEK** (note that make-up classes may be scheduled in this week)<br>**Semester 1** – This aligns with the week after Easter so it may fall between Weeks 6 to 8<br>**Semester 2** – The non-teaching week falls between Weeks 7 and 8 | |
| **8.** | **Trigger Points and Neuromuscular Techniques (NMT)**<br>• Overview, context and historical understanding<br>• Aetiology, clinical features & diagnosis<br>• Pathophysiology | • Identification of common trigger points of the lower limb |
| **9.** | **Trigger Points**<br>• Diagnosis & palpation<br>• Reliability of palpation<br>• Neuromuscular techniques for the pelvis and thigh | • Neuromuscular techniques for the pelvis and thigh |
| **10.** | **Trigger Points (Continued)**<br>• Neuromuscular techniques for the knee, leg and foot | • Neuromuscular techniques for the knee, leg and foot |
| **11.** | **Trigger Points (Continued)**<br>• Applied case studies | • Case-study based treatment of trigger points |
| **12.** | **Integration: Putting It All Together**<br>• Integrated assessment and treatment of the hip and knee region<br>• Clinical reasoning<br>**Exam Preparation** | • Case-study based assessment and treatment of the lower limb<br>  ○ Posture and gait assessment<br>  ○ Range of movement assessment<br>  ○ Treatment of trigger points |
| **13.** | **Final Practical Exam** | |
| **14-15.** | **Non-Teaching Weeks / Practical Examination Weeks 1 & 2**<br>Note that make-up classes may be scheduled in these weeks | |
| **16.** | **Final Examination Week 1**<br>Students are required to sit examinations using the Respondus Lockdown Browser software per the Examination Policy – Higher Education. Refer to the LMS for exam opening and closing times. | |

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| **17.** | **Final Examination Week 2**<br>Students are required to sit examinations using the Respondus Lockdown Browser software per the Examination Policy – Higher Education. Refer to the LMS for exam opening and closing times. |