Subject Name: Myofascial Dry Needling 1
Subject Code: MSTM311

SECTION 1 – GENERAL INFORMATION

Award/s: Bachelor of Health Science (Myotherapy)
Total course credit points: 96
Level: 3rd Year
Duration: 1 Semester

Subject Coordinator: Stacey Mahboub (Brisbane campus)
Subject is: Core
Subject Credit Points: 2

Student Workload:

<table>
<thead>
<tr>
<th>No. timetabled hours per week</th>
<th>No. personal study hours per week</th>
<th>Total hours per week</th>
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<tr>
<td>3</td>
<td>2</td>
<td>5</td>
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Delivery Mode:
- Face to face
- Intensive delivery Details:
  - Summer School - Contact hours are delivered over 5 weeks with 2 x 4.5 hour days delivered per week
  - Assessment: Attendance - Weeks 1-5; Mid-semester Practical Exam - Week 3; Progressive Workbook - Week 4; Final Practical Exam - Week 5

Pre-requisites: MSTN121, MSTA212, MSTC223
Co-requisites: Nil
Special resource requirements: WWCC (or its equivalent) for the location in which subject is undertaken as per Working with Children Check Policy
- HLTAID003 Provide first aid (VET unit of competency)
- Closed-toe leather footwear

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

Students are introduced to the historical origins of myofascial dry needling (MDN) and its development over the last hundred years. This subject explores and expands the application of MDN as a valid adjunctive therapy in the treatment of myofascial pain syndrome. This introduction encompasses the principles and techniques of MDN and its application in the reduction of soft tissue contracture. Students will expand on their existing knowledge of myofascial pain and its role in the assessment and treatment of a range of painful conditions. Protocols pertinent to infection control, personal and clinical hygiene including skin penetration are strengthened to comply with current health and safety regulations. Students will be assessed for demonstrated clinical efficacy, personal and client safety. This subject is a pre-requisite for MSTM322, Myofascial Dry Needling 2.
Learning Outcomes

1. Distinguish between the characteristics of myofascial pain syndromes.
2. Discuss the neurophysiological mechanisms by which myofascial dry needling (MDN) contributes to the resolution of myofascial pain syndrome.
3. Adhere to work health and safety regulations for safe skin penetration, and endangerment sites applicable to MDN.
4. Demonstrate the ability to palpate and select a MTP site for MDN application with consideration to relative contraindications and precautions.
5. Choose between the safe application of superficial and deep dry needling relative to client presentation.
6. Organise the application of myofascial dry needling in treatment plan relative to other therapeutic interventions.

Assessment Tasks

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<tr>
<th>Type</th>
<th>Learning Outcomes Assessed</th>
<th>Weeks Content Delivered</th>
<th>Due</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>N/A</td>
<td>N/A</td>
<td>Sessions 1-13</td>
<td>Pass/Fail</td>
</tr>
<tr>
<td>Mid-semester Practical Exam</td>
<td>3-5</td>
<td>1-6</td>
<td>Session 7</td>
<td>35%</td>
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<td>(30 minutes)</td>
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<tr>
<td>Progressive Workbook</td>
<td>1-3, 5-6</td>
<td>1-11</td>
<td>Week 12</td>
<td>30%</td>
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<tr>
<td>Final Practical Exam</td>
<td>2-5</td>
<td>1-12</td>
<td>Session 13</td>
<td>35%</td>
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<tr>
<td>(30 minutes)</td>
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The overall pass mark for this subject is 50%
Additionally, students must pass the Final Practical Exam with a mark of not less than 50%

All written assessments and online quizzes are due at 11:55PM and submitted through the LMS

Prescribed readings:

Recommended readings:
2. Revision of the health and safety regulations pertaining to skin penetration
   - Safe disposal of needles and the equipment required to practice safely
   - Needling technique using manual or guide tube insertion for SDN and DDN applications
   - Treatment of trigger points using dry needling
   - Mechanisms of trigger point activation/deactivation
   - Indications for myofascial dry needling
   - Neurophysiology of pain and the mechanisms of dry needling in the treatment of myofascial pain
   - Locate painful MTPs for consideration of needle insertion in preference to ischemic pressure
   - Introduction to needling and demonstration of basic needling application methods
   - Disinfection of skin at possible insertion sites
   - Practice effective, safe and painless superficial needling techniques with guide-tubed needles
   - Practice MTP location and safe needling techniques
   - Safe and hygienic needle disposal
   Supervised student practice of demonstrated techniques

3. Anatomy and palpation of specific muscles, trigger points and referral patterns of the arm and forearm
   - Review endangerment sites, contraindications and precautions to this area
   - Demonstration of dry needling to muscles of the upper limb
   Supervised student practice of demonstrated techniques

4. Anatomy and palpation of specific muscles, trigger points and referral patterns of the rotator cuff and shoulder
   - Review endangerment sites, contraindications and precautions to this area
   - Demonstration of dry needling of muscles of the upper limb
   Supervised student practice of demonstrated techniques
   Review of the research for dry needling (review of journal articles)

5. Anatomy and palpation of specific muscles, trigger points and referral patterns of the head, neck and thorax
   - Review endangerment sites, contraindications and precautions to this area
   - Demonstration of dry needling of muscles to the region
   Supervised student practice of demonstrated techniques
   Following an evidence-informed approach to dry needling (review of journal articles)

6. Anatomy and palpation of specific muscles, trigger points and referral patterns of the pelvis and hip
   - Review endangerment sites, contraindications and precautions to this area
   - Demonstration of dry needling of muscles to the lower limb
   Supervised student practice of demonstrated techniques

7. Mid-semester Practical Exam
   Non-teaching Week (note that make-up classes may be scheduled in this week)
   Semester 1 - This aligns with the week after Easter so it may fall between Weeks 6 to 8
   Semester 2 - The break week falls between Weeks 7 and 8

8. Anatomy and palpation of specific muscles, trigger points and referral patterns of the thigh
   - Review endangerment sites, contraindications and precautions to this area
   - Demonstration of dry needling of muscles of the thigh
   Supervised student practice of demonstrated techniques
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| 9. | Anatomy and palpation of specific muscles, trigger points and referral patterns of the leg and foot  
  - Review endangerment sites, contraindications and precautions to this area  
  - Demonstration of dry needling of muscles to the lumbar region  
  Supervised student practice of demonstrated techniques  
  Frontiers in dry needling research (review of journal articles) |
| 10. | Physical assessment for dry needling interventions to the lower limb  
  - Apply differential diagnosis for application of SDN or DDN relevant to assessment findings  
  Supervised student practice of demonstrated techniques |
| 11. | Physical assessment for dry needling interventions for the upper limb  
  - Apply differential diagnosis for application of SDN or DDN relevant to assessment findings  
  Supervised student practice of demonstrated techniques to the upper limbs |
| 12. | Demonstration of physical assessment and integration of manual therapy interventions  
  - Specific case scenario combined with SDN and DDN in the simulation of clinical practice  
  - Determine appropriate methods of treatment through differentiation of presenting signs and symptoms and applying the correct protocols for treatment  
  Group discussion and application of manual therapies and MDN interventions for the torso |
| 13. | Final Practical Exam |
| 14. | Non-teaching Week/Practical Examination Week 1  
  Note that make-up classes may be scheduled in this week |
| 15. | Non-teaching Week/Practical Examination Week 2  
  Note that make-up classes may be scheduled in this week |
| 16. | Final Examination Week 1  
  There is no final written exam in this subject |
| 17. | Final Examination Week 2  
  There is no final written exam in this subject |