

# SUBJECT OUTLINE

Subject Name:

## Musculoskeletal Anatomy and Palpation 2

Subject Code:

**MSTA212**

### SECTION 1 – GENERAL INFORMATION

|                             |   |                                    |    |               |                      |
|-----------------------------|---|------------------------------------|----|---------------|----------------------|
| <b>Award/s:</b>             | Bachelor of Health Science (Myotherapy) | <b>Total course credit points:</b> | 96 | <b>Level:</b> | 1 <sup>st</sup> Year |
| <b>Duration:</b>            | 1 Semester                              |                                    |    |               |                      |
| <b>Subject Coordinator:</b> | Sue Sharpe (Melbourne campus)           |                                    |    |               |                      |
| <b>Subject is:</b>          | Core                                    | <b>Subject Credit Points:</b>      | 2  |               |                      |

#### Student Workload:

| No. timetabled hours per week: | No. personal study hours per week: | Total hours per week: |
|--------------------------------|------------------------------------|-----------------------|
| 3                              | 2                                  | 5                     |

#### Delivery Mode:

|                    |   |
|--------------------|---|
| Face to face       | 1 x 3 hour practical  |
| Intensive delivery | Details: Summer School - contact hours are delivered over five weeks with 2 x 4 hour days delivered per week.<br>Assessment: Mid-semester Practical Exam is completed in Week 3.<br>Final Practical Exam is conducted in week 6 of summer school. |

Full Time

Part Time

**Pre-requisites:** MSTA121

**Co-requisites:** BIOH122

**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

### SECTION 2 – ACADEMIC DETAILS

#### Subject Rationale

In this subject students will further develop the skills and knowledge gained in MSTA121 and accompanying practical and therapeutic subjects. The aim of this subject is to apply the already learned skills to the more detailed and deeper anatomy of the body. On completion of this subject students will have a working knowledge of the musculoskeletal anatomy of the body and will know how to identify, locate and palpate bony landmarks, muscles, bones, ligaments, tendons and other relevant structures as part of a musculoskeletal assessment.

#### Learning Outcomes

1. Describe and apply the terminology used to orient practitioners to the body and its movements, and the actions permissible at the relevant joints of the body.
2. Name, locate and demonstrate how to palpate bony landmarks, other relevant anatomical structures and muscles, ligaments and tendons associated with the joints of the body.
3. Extend the skills necessary to carry out a musculoskeletal examination on a client.

| Assessment Tasks  |                            |                         |               |           |
|---|----------------------------|-------------------------|---------------|-----------|
| Type  | Learning Outcomes Assessed | Weeks Content Delivered | Due           | Weighting |
| <b>Attendance</b><br>(80% attendance is required)   | 1-3                        | 1-12                    | Sessions 1-12 | Pass/Fail |
| <b>Wet Lab Field Trip</b>   | 1,2                        | 8*                      | Session 8*    | Pass/Fail |
| <b>Mid-semester Practical Exam</b><br>(30 mins)   | 1-3                        | 1-6                     | Session 7     | 40%       |
| <b>Wet Lab Workbook</b>   | 1,2                        | 1-10                    | Week 11       | 20%       |
| <b>Final Practical Exam</b><br>(30 mins)  | 1-3                        | 1-12                    | Session 13    | 40%       |
| All written assessments and online quizzes are due at 11:55PM and submitted through the LMS |                            |                         |               |           |

#### Prescribed readings:

1. Biel, A. (2014). *Trail guide to the body* (5th ed.). Boulder, CO: Books of Discovery.
2. Biel, A. (2014). *Trail guide to the body: Student handbook* (5th ed.). Boulder, CO: Books of Discovery.

#### Recommended readings:

1. Argosy Publishing. (2014). *Visible body*. Retrieved from <http://www.visiblebody.com>
2. Muscolino, J.E. (2011). *Kinesiology: The skeletal system and muscle function* (2nd ed.). St Louis, MO: Mosby.
3. Neumann, D. A. (2010). *Kinesiology of the musculoskeletal system: foundations for rehabilitation* (2nd ed.). St Louis, MO: Mosby. [eBook available]

| Subject Content |  |
|-----------------|--|
| Week            | Practical  |
| 1.              | <b>Introduction: Subject Outline/subject aims/assessment/teaching resources</b><br><b>Review of joints, movement and anatomical terminology</b><br>Upper limb: The pectoral girdle <ul style="list-style-type: none"> <li>• Associated joints               <ul style="list-style-type: none"> <li>○ Scapulothoracic, glenohumeral, acromioclavicular and sternoclavicular</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> <li>• The pectoral girdle</li> </ul> |
| 2.              | Upper limb: The elbow, wrist and hand <ul style="list-style-type: none"> <li>• Associated joints               <ul style="list-style-type: none"> <li>○ Humeroulnar, humeroradial, proximal and distal radioulnar, radiocarpal, midcarpal, carpometacarpal, metacarpophalangeal, interphalangeal</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> </ul>  |
| 3.              | Upper limb: The hand <ul style="list-style-type: none"> <li>• Associated joints               <ul style="list-style-type: none"> <li>○ Carpometacarpal, metacarpophalangeal, interphalangeal</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> </ul>  |
| 4.              | Axial skeleton: The head and neck <ul style="list-style-type: none"> <li>• Associated joints               <ul style="list-style-type: none"> <li>○ Temporomandibular, craniovertebral (atlantooccipital and atlantoaxial), intervertebral</li> </ul> </li> </ul>  |

|        |  |
|--------|--|
|        | <ul style="list-style-type: none"> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> </ul>   |
| 5.     | <p>Axial skeleton: The head and neck</p> <ul style="list-style-type: none"> <li>• Associated joints           <ul style="list-style-type: none"> <li>○ Craniovertebral, intervertebral, costovertebral, sternocostal</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> <li>• The spine</li> </ul>                                   |
| 6.     | <p>Axial skeleton: The trunk</p> <ul style="list-style-type: none"> <li>• Associated joints           <ul style="list-style-type: none"> <li>○ Intervertebral</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> <li>• The muscles of respiration</li> <li>• Forced inhalation/exhalation and quiet inhalation/exhalation</li> </ul> |
| 7.     | <b>Mid-Semester Practical Examination</b>  |
|        | <p><b>NON-TEACHING WEEK</b> (note that make-up classes may be scheduled in this week)</p> <p><b>Semester 1</b> - This aligns with the week after Easter so it may fall between weeks 6 to 8.</p> <p><b>Semester 2</b> - The break week falls between Weeks 7 and 8.</p>  |
| 8.     | <p><b>Wet Lab Field Trip</b></p> <p>(*Please note that the week of this session may need to change dependent on wet lab availability)</p>  |
| 9.     | <p>Lower limb: The pelvic girdle</p> <ul style="list-style-type: none"> <li>• Associated joints           <ul style="list-style-type: none"> <li>○ Sacroiliac, coccygeal</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> </ul>  |
| 10.    | <p>Lower limb: The knee, ankle and foot</p> <ul style="list-style-type: none"> <li>• Associated joints           <ul style="list-style-type: none"> <li>○ Tibiofemoral, patellofemoral, tibiofibular, talocrural, subtalar</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> <li>• The knee</li> </ul>                              |
| 11.    | <p>Lower limb: The foot</p> <ul style="list-style-type: none"> <li>• Associated joints           <ul style="list-style-type: none"> <li>○ Talocrural, subtalar</li> </ul> </li> <li>• Review palpation of pulses, bony landmarks and superficial muscle</li> <li>• Advanced palpation of bony landmarks, muscles and associated structures</li> <li>• The foot</li> </ul>  |
| 12.    | <p>The influence of gravity and position</p> <p>Revision and mock examination</p>  |
| 13.    | <b>Final Practical Exam held this week</b>   |
| 14-15. | <p><b>Non-Teaching Week / Practical Examination Weeks 1 &amp; 2</b></p> <p>Note that make-up classes may be scheduled in this week</p>   |
| 16-17. | <p><b>Final Examination Weeks 1 &amp; 2</b></p> <p>There is no final written exam for this subject</p>   |