

## Subject Outline

<b>Subject Name:</b>	Musculoskeletal Anatomy and Palpation 1
<b>Subject Code:</b>	BIOA121
<b>Award(s):</b>	Bachelor of Health Science (Musculoskeletal Therapy)
<b>Core/Elective:</b>	Core - 2 credit points
<b>Pre/co-requisites:</b>	BIOH111
<b>Student Workload:</b>	39 hours face to face 36 hours self-directed study
<b>Delivery Mode:</b>	<b>Face to face</b> <ul style="list-style-type: none"> <li>• 3 hours lecture/workshop</li> </ul> <b>Full Time</b> <b>Part Time</b>
<b>Subject Coordinator</b>	Sue Sharpe
<b>Subject Rationale:</b>	This subject enables students to acquire knowledge of musculoskeletal anatomy and develop assessment skills, including palpation during musculoskeletal examination. Students learn to palpate the surface of the body, locate and name bony landmarks, individual muscles and other structures, major joints and their ranges of motion. This knowledge and skill will equip students to differentiate between optimal and sub-optimal performance in human physical function.

## Learning Outcomes:

1.	Accurately palpate and describe anatomical regions and their movements using appropriate terminology
2.	Name, locate and demonstrate the different palpation techniques used in musculoskeletal examination of the body.
3.	Describe the attachment, relations and actions of the relevant muscles of the body.
4.	Demonstrate palpation skills when carrying out musculoskeletal examinations

**Content**

<b>Week</b>	<b>Lecture/Practical</b>
1.	<p>Session 1</p> <p>Orientation: Subject Outline/Subject Aims/Assessment/Teaching Resources</p> <p>Review:</p> <ul style="list-style-type: none"> <li>Names and classification of bones</li> <li>Axial and appendicular skeleton</li> <li>Anatomical terminology: anatomical position, directions and planes</li> <li>Joint types</li> </ul> <p>Relevant activities for all teaching sessions are directed by the lecturers/tutors through in class discussion, demonstration, student participation and practice of prescribed skills.</p>
2.	<p>Session 2</p> <p>Review:</p> <ul style="list-style-type: none"> <li>Joint types and movements</li> </ul> <p>Introduction to assessment skills: Demonstration of appropriate techniques: Inspection &amp; palpation</p> <p>Introduction to palpating bony anatomy: Scapula</p>
3.	<p>Session 3</p> <p>The upper limb: Bony and vascular anatomy</p> <ul style="list-style-type: none"> <li>Observation and palpation of skin, fascia, pulses, joints, bony landmarks and other associated structures</li> </ul>
4.	<p>Session 4</p> <p>The axial skeleton: Bony and vascular anatomy</p> <ul style="list-style-type: none"> <li>Observation and palpation of skin, fascia, pulses, joints, bony landmarks and other associated structures</li> </ul>
5.	<p>Session 5</p> <p>The lower limb: Bony and vascular anatomy</p> <ul style="list-style-type: none"> <li>Observation and palpation of skin, fascia, pulses, joints, bony landmarks and other associated structures</li> </ul>
6.	<p>Session 6</p> <p><b>Mid-Semester Practical Exam</b></p>
7.	<p>Session 7</p> <p>Muscular anatomy of the upper limb: pectoral girdle</p> <ul style="list-style-type: none"> <li>Palpation of muscles of the pectoral girdle to demonstrate location and actions</li> </ul> <p>Professional considerations regarding palpation over/near breast tissue</p>
8.	<p><b>Mid-Semester Break</b></p> <p>Semester 1 – The mid semester break from weeks 6 - 8 in relation to Easter.</p> <p>Semester 2 – Week 8.</p>
9.	<p>Session 8</p> <p>Muscular anatomy of the upper limb: elbow, wrist and hand</p> <ul style="list-style-type: none"> <li>Palpation of muscles of the elbow, wrist and hand to demonstrate location and actions</li> </ul>
10.	<p>Session 9</p>

	<p>Muscular anatomy of the proximal upper limb and axial skeleton</p> <ul style="list-style-type: none"> <li>• Palpation of muscles of the proximal upper limb and axial skeleton to demonstrate location and actions</li> </ul>
11.	<p>Session 10</p> <p>Muscular anatomy of the proximal lower limb and axial skeleton</p> <ul style="list-style-type: none"> <li>• Palpation of muscles of the proximal lower limb and axial skeleton to demonstrate location and actions</li> </ul>
12.	<p>Session 11</p> <p>Muscular anatomy of the lower limb: hip and knee</p> <ul style="list-style-type: none"> <li>• Palpation of muscles of the hip and knee to demonstrate location and actions</li> </ul>
13.	<p>Session 12</p> <p>Muscular anatomy of the lower limb: knee, ankle and foot</p> <ul style="list-style-type: none"> <li>• Palpation of muscles of the knee, ankle and foot to demonstrate location and actions</li> </ul>
14.	<p>Session 13</p> <p>Review</p>
15-16.	<p><b>Study Week/Practical Exam Period</b></p> <p>Final practical exam will be held in normal class time.</p>
17-18.	<p><b>Final Exam Period</b></p> <p><i>There is no final exam for this subject.</i></p>

**Set Text Requirements:**

1. Biel, A 2014, <i>Trail guide to the body</i> , 5 <sup>th</sup> edn, Books of Discovery, Boulder, CO.
2. Biel, A 2014, <i>Trail guide to the body: Student handbook</i> , 5 <sup>th</sup> edn, Books of Discovery, Boulder, CO.

**Recommended Readings:**

1. Argosy Publishing 2014, <i>Visible body</i> , viewed 15 April 2015, < <a href="http://www.visiblebody.com">http://www.visiblebody.com</a> >.
2. Argosy Publishing 2014, <i>Muscle premium</i> , viewed 15 April 2015, < <a href="http://muscle.visiblebody.com">http://muscle.visiblebody.com</a> >.
3. Muscolino, JE 2011, <i>Kinesiology: The skeletal system and muscle function</i> , 2 <sup>nd</sup> edn, Mosby, St Louis, Missouri.
4. Neumann, DA 2010, <i>Kinesiology of the musculoskeletal system: Foundations for rehabilitation</i> , 2 <sup>nd</sup> edn, Mosby, St Louis, Missouri.
5. Tortora, G & Derrickson, B 2014, <i>Principles of anatomy and physiology</i> , 14 <sup>th</sup> edn, John Wiley, Hoboken, NJ.

**Special Resource Requirements:**

1. Two bath-sheet sized towels per student (Clinic towels must not be used)
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**Assessments:**

Assessment Item	Topic/s	Learning Outcomes assessed	Session Content Delivered	Session Due	Weighting
1. Ongoing practical assessment	All topics	1-4	Week 1-14	13	20%
2. Mid-semester Practical Exam (1 hour)	Palpation skills and palpation of bony landmarks, joints and other structures of various body regions	1-4	1-5	6	40%
3. Final Practical Exam (1 hour)	Palpation skills and palpation of muscles and other structures of various body regions	1-4	7-13	Practical Exam Period	40%

Formative assessment will be undertaken early in the subject and then on a regular basis throughout the duration of the subject to provide students and staff with feedback on the learning. It may take the form of quizzes, small group and classroom presentations, writing activities, peer review where appropriate.

Early formative assessment would be used to determine any necessary intervention strategies to ensure students are able to complete the program in the normal subject duration.

Feedback will also be provided on summative assessment undertaken during semester.

***The overall passing mark for this subject is 70%***

***Additionally, students must pass the final assessment with a mark not less than 70%***