ANAT30007 Human Locomotor Systems

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<tr><td>Credit Points:</td><td>12.50</td></tr>
<tr><td>Level:</td><td>3 (Undergraduate)</td></tr>
<tr><td>Dates & Locations:</td><td>2012, Parkville
This subject commences in the following study period/s:
Semester 1, Parkville - Taught on campus.
An enrolment quota of 495 students applies to this subject. For detailed information on the quota subject application process, refer to the Quota Subject link (under Advice and Support) on the MDHS Student Centre website: http://sc.mdhs.unimelb.edu.au/</td></tr>
<tr><td>Time Commitment:</td><td>Contact Hours: 72 hours (3 x one hour lectures per week, 1 x three hour practical per week)
Total Time Commitment: 120 hours</td></tr>
<tr><td>Prerequisites:</td><td>You must have taken the following subject prior to enrolling in this subject:
<table>
<tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr>
<tr><td>ANAT20006 Principles of Human Structure</td><td>Semester 1, Semester 2</td><td>12.50</td></tr>
</table>
OR (For Bachelor of Biomedicine students)
<table>
<tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr>
<tr><td>BIOM20002 Human Structure and Function</td><td>Semester 2</td><td>25</td></tr>
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Note: 516-204 Anatomy 1 and 516-207 Anatomy 2 are alternative pre-requisites for entry into this subject.</td></tr>
<tr><td>Corequisites:</td><td>None</td></tr>
<tr><td>Recommended Background Knowledge:</td><td>None</td></tr>
<tr><td>Non Allowed Subjects:</td><td>None</td></tr>
<tr><td>Core Participation Requirements:</td><td>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/</td></tr>
<tr><td>Coordinator:</td><td>Assoc Prof Chris Briggs</td></tr>
<tr><td>Contact:</td><td>Academic Coordinator
Dr Chris Briggs
c.briggs@unimelb.edu.au (mailto:c.briggs@unimelb.edu.au)
Administrative Coordinator:
Ms Kim Williams
BiomedSci-AcademicServices@unimelb.edu.au (mailto:BiomedSci-AcademicServices@unimelb.edu.au)</td></tr>
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Subject Overview:	We expect that a student who completes this subject will comprehend the terminology of human topographic anatomy as it relates to the back, neck and limbs; the microstructure of cartilage, bone, muscle and nerve and their response to mechanical loading; the detailed functional anatomy of the back, neck, upper and lower limbs; the principles underlying human gait and locomotion and the evolutionary stages leading from primate to human locomotion; the design of artificial joints and limbs; neural control of gait and locomotion; use dissecting instruments to expose the boundaries and contents of clinically important regions of the back, neck and limbs; appreciate the appearance of normal anatomical structures via modern imaging techniques.
Objectives:	By the end of this subject, students should: # comprehend the organisation of the human locomotor system; the microstructure of cartilage, bone, muscle and nerve and their response to loading; the factors responsible for trunk stability including support of the vertebral column and head; the applied anatomy of the back and neck; the organisation of the joints, muscles and fascia of the upper and lower limbs; radiological anatomy of the back, neck and limbs; gait and locomotion in primates and man; central nervous system control of movement; the design and reconstruction of artificial joints and limbs; # manipulate dissecting instruments to expose the boundaries and contents of clinically important regions of the back, neck and limbs; # develop observational and organisational skills to identify and interpret exposed anatomical structures and regions of the back, neck and limbs; communication skills (written and oral) to describe the normal structure of the human body; and # appreciate the important clinical applications relevant to body regions and the approaches to imaging the back, neck and limbs.
Assessment:	Quizzes on theory and practical work throughout the semester (20%); 2-hour written theory examination in the examination period (50%); practical examination in the examination period (30%)
Prescribed Texts:	Drake et al Gray's Anatomy for Students, Elsevier 2009 OR Moore KL et al: Clinically Oriented Anatomy, Lippincott Williams & Wilkins 2009
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2012/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2012/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2012/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2012/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	# Capacity for independent study, rational enquiry and self-directed learning. # Ability to analyse problems. # Oral and written communication skills. # Time management skills. # Teamwork in interpretation and analysis of new information.
Notes:	This subject is available to students enrolled in the New Generation BSc, BBiomed, pre-2008 BSc, pre-2008 BASc, pre-2008 BBiomedSc.
Related Majors/Minors/ Specialisations:	Anatomy (pre-2008 Bachelor of Science) Human Structure and Function Physiology Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.