# ANAT1002

## Anatomy of Limbs and Back

Session 1, In person-scheduled-weekday, North Ryde 2024

*Department of Chiropractic*

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## Disclaimer

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https://unitguides.mq.edu.au/unit_offerings/162650/unit_guide/print
General Information

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Credit points
10

Prerequisites
HLTH108 or ANAT1001

Corequisites

Co-badged status

Unit description
This unit follows on from ANAT1001 to enable you to develop a detailed understanding of functional anatomy of the limbs and back. Focus is placed on applying the knowledge of structures and their functions that form the basis of movement in the limbs and back. You will have the opportunity to gain hands-on learning experience using various media including cadaveric specimens. You will apply theoretical and practical knowledge to solve problems based on real life and clinical scenarios.

Important Academic Dates
Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes
On successful completion of this unit, you will be able to:

ULO1: Demonstrate knowledge of the anatomy of the limbs and back with emphasis on understanding the structure-function relationship and significance in health and disease.

ULO2: Apply anatomical knowledge to analysis of clinical and functional presentations relating to the limbs and back.

ULO3: Demonstrate skills in identifying surface anatomy landmarks of the limbs and back.

ULO4: Correlate normal anatomy of the limbs and back with interpretation of medical
General Assessment Information

Grade descriptors and other information concerning grading are contained in the Macquarie University Assessment Policy. All final grades are determined by a grading committee, in accordance with the Macquarie University Assessment Policy, and are not the sole responsibility of the Unit Convenor. Students will be awarded a final grade and a mark which must correspond to the grade descriptors specified in the Assessment Procedure (clause 128). To pass this unit, you must demonstrate sufficient evidence of achievement of the learning outcomes, meet any ungraded requirements, and achieve a final mark of 50 or better. Further details for each assessment task will be available on iLearn.

Late Submissions

Unless a Special Consideration request has been submitted and approved, a 5% penalty (OF THE TOTAL POSSIBLE MARK) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of ‘0’ will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11.55pm. A 1-hour grace period is provided to students who experience a technical concern. For example:

<table>
<thead>
<tr>
<th>Number of days (hours) late</th>
<th>Total Possible Marks</th>
<th>Deduction</th>
<th>Raw mark</th>
<th>Final mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day (1-24 hours)</td>
<td>100</td>
<td>5</td>
<td>75</td>
<td>70</td>
</tr>
<tr>
<td>2 days (24-48 hours)</td>
<td>100</td>
<td>10</td>
<td>75</td>
<td>65</td>
</tr>
<tr>
<td>3 days (48-72 hours)</td>
<td>100</td>
<td>15</td>
<td>75</td>
<td>60</td>
</tr>
<tr>
<td>7 days (144-168 hours)</td>
<td>100</td>
<td>35</td>
<td>75</td>
<td>40</td>
</tr>
<tr>
<td>&gt;7 days (&gt;168 hours)</td>
<td>100</td>
<td>-</td>
<td>75</td>
<td>0</td>
</tr>
</tbody>
</table>

For any late submissions of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to submit an application for Special Consideration.

Online Quizzes (20%)

There are ten weekly online quizzes (as per timetable). Each Quiz typically includes multiple choice, matching, T/F and identification questions on the topics of the given week. Questions are drawn from a database organised by specific subtopics for each question in the quiz. Time allocated: around 1.5-2 min per each question. The Quiz closes automatically once the time allocated runs out. Unfinished attempts will be saved automatically. You have ONE attempt at each question and ONE attempt for the whole quiz. The Quiz will become available on the Friday
evening of the allocated week and will stay open for one week to complete it in your own time. Late attempts are not allowed (zero marks). Written feedback will be provided. An exemplar quiz will be released to allow more practice. The best SEVEN marks out of TEN marks for the quizzes are counted towards the 20% of the final mark for the unit. The schedule of quizzes and their topics can be found in the timetable and iLearn.

Practical Examinations (35%)

The Prac Exam 1 (Week 6) and Prac Exam 2 (Week 12), focus on practical identifications of anatomical structures. These tests are typically held in the usual scheduled practical laboratory classes, in the wet laboratory, in person. Prac Exams assess students’ ability to identify correctly anatomical structures on human remains, bones, models, medical images, and surface anatomy on real specimens and/or photographs. Typically, there are around 14 stations, each with five identifications. The scope of Prac Exam 1 is on the practical knowledge achieved on the Upper Limb topics, and Prac Exam 2 examines the practical knowledge on the Lower Limb, Back/Trunk topics. The value of Prac Exam 1 is 15% and of Prac Exam 2 is 20% towards the final mark for the unit. For these assessments, students must attend the class they are enrolled in. If a practical exam is missed a supplementary exam will only be considered under the Special Consideration policy (https://students.mq.edu.au/study/my-study-program/specialconsideration). Applications for special consideration should be submitted online within 5 days of the missed assessment (see: www.ask.mq.edu.au). The supplementary prac exams will be conducted in similar way as the main sittings (e.g. if prac exam was conducted in person, the supplementary prac exam will also be in person). Note: the supplementary prac exams are typically conducted AFTER EXAMINATION PERIOD; therefore, please do not plan your travel until confirming the date for the supplementary. There will be no individual sittings of prac exams due to the nature of the prac exams.

Presentation (10%)

This includes weekly forum reflections (weeks 3 throughout to 10) = 5% and a 2-min-video submission (5%) on the topic relevant to reflections. The topic to be selected by a student from a list of topics suggested.

Final Theory Examination (35%)

This examination is held during the formal examination period, at the end of the semester. Its value is 35% towards the final mark. The examination is based on the entire content studied throughout the term covering gross anatomy of the limbs and back. The format of this paper comprises multiple choice and short answer questions. A typical structure of the examination paper includes around 60 multiple choice questions (answers to be filled in the automated marking sheets) and several (e.g. three to five) short answer questions (answers to be written in the answer booklet provided). Short answer questions are based on clinical scenarios and problems discussed in lectures and tutorials. The content of this examination is aligned with the learning outcomes for the unit and all learning activities that students participate in throughout the entire semester. The confidence in the knowledge and the examination skills will be built consistently throughout participation in weekly summative and formative quizzes (multiple choice questions) and tutorial discussions (problem solving and clinical cases). Special Consideration procedures are as described above.
# Assessment Tasks

<table>
<thead>
<tr>
<th>Name</th>
<th>Weighting</th>
<th>Hurdle</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final Theory Exam</strong></td>
<td>35%</td>
<td>No</td>
<td>Examination Period</td>
</tr>
<tr>
<td><strong>Quizzes</strong></td>
<td>20%</td>
<td>No</td>
<td>Weekly</td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td>10%</td>
<td>No</td>
<td>Weekly Forum Posts &amp; Video-submission in Wk10</td>
</tr>
<tr>
<td><strong>Practical Examination</strong></td>
<td>35%</td>
<td>No</td>
<td>Week 6 &amp; 12</td>
</tr>
</tbody>
</table>

## Final Theory Exam

**Assessment Type**: Examination  
**Indicative Time on Task**: 25 hours  
**Due**: Examination Period  
**Weighting**: 35%

Final theory exam includes main concepts studied for the entire unit. This exam will test your understanding and ability to analyse and apply anatomical knowledge to relevant life and clinical scenarios.

On successful completion you will be able to:

- Demonstrate knowledge of the anatomy of the limbs and back with emphasis on understanding the structure-function relationship and significance in health and disease.
- Apply anatomical knowledge to analysis of clinical and functional presentations relating to the limbs and back.
- Demonstrate skills in identifying surface anatomy landmarks of the limbs and back.

## Quizzes

**Assessment Type**: Quiz/Test  
**Indicative Time on Task**: 14 hours  
**Due**: Weekly  
**Weighting**: 20%

Weekly quizzes that focus on the content covered in a given week.
On successful completion you will be able to:

- Demonstrate knowledge of the anatomy of the limbs and back with emphasis on understanding the structure-function relationship and significance in health and disease.
- Apply anatomical knowledge to analysis of clinical and functional presentations relating to the limbs and back.
- Demonstrate skills in identifying surface anatomy landmarks of the limbs and back.
- Correlate normal anatomy of the limbs and back with interpretation of medical imaging.

**Presentation**

Assessment Type: Media presentation
Indicative Time on Task: 7 hours
Due: Weekly Forum Posts & Video-submission in Wk10
Weighting: 10%

An individual presentation on a topic selected from a list of topics. The presentation mode may include a video, podcast or power point presentation.

On successful completion you will be able to:

- Demonstrate knowledge of the anatomy of the limbs and back with emphasis on understanding the structure-function relationship and significance in health and disease.
- Apply anatomical knowledge to analysis of clinical and functional presentations relating to the limbs and back.
- Demonstrate skills in identifying surface anatomy landmarks of the limbs and back.
- Correlate normal anatomy of the limbs and back with interpretation of medical imaging.

**Practical Examination**

Assessment Type: Examination
Indicative Time on Task: 25 hours
Due: Week 6 & 12
Weighting: 35%

Practical examination will assess your ability to identify significant anatomical structures and their topographical relations using a variety of media. There will be two practical exams.
On successful completion you will be able to:

- Demonstrate knowledge of the anatomy of the limbs and back with emphasis on understanding the structure-function relationship and significance in health and disease.
- Apply anatomical knowledge to analysis of clinical and functional presentations relating to the limbs and back.
- Demonstrate skills in identifying surface anatomy landmarks of the limbs and back.
- Correlate normal anatomy of the limbs and back with interpretation of medical imaging.

1 If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

2 Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

**Delivery and Resources**

As a student enrolled in this unit, you will engage in a range of face-to-face (laboratories and tutorials) and online (lectures and formative tasks) activities. Details can be found in the iLearn site for this unit.

**1. Unit Schedule**

A typical weekly schedule includes:

- two 1-hour online lectures (see timetable); lecture slides will be available in Weekly iLearn folders, and zoom recordings - via ECHO360. We strongly encourage you attending lectures on a weekly basis because lecture attendance strongly positively correlates with final grades for the unit. While attending the lectures, please use lecture notes/worksheets provided in the Unit Manual. This will prepare you well for the lab and tutorial.
- one 2-hour 'in person' laboratory practical (as per enrolment), where we offer you experiential learning utilising models, bones, images and human postmortem tissue specimens. Prior to attending the lab, we strongly advise you attending the lectures and watching the relevant fragments of Acland’s Video Atlas (available online for free via MQU Library). We advise you to print and bring your Unit Manual to the lab. In the lab, you will need to wear enclosed shoes and lab coat. You can only attend the labs strictly per enrolment. Prior to attending your first lab, you are required to complete the Online
Lab Induction Module. We strongly advise you attending the labs because the knowledge and skills you develop during the labs are directly linked to the practical examinations and all other assessments in the unit, including online quiz.

- one 1.5-hour 'in person' tutorial that consolidates your knowledge on the given topic by in-depth-discussions of content delivered in lectures and laboratories applied to clinical cases and real life scenarios. This activity facilitates the development of deeper understanding of the unit content and forming long-term memory, which enhances a performance in the assessment. We strongly advice you attending tutorials for achieving the best results possible.
- independent work (at least 4 hours/week); this include tasks outlined in the Unit Manual, online activities including revision, 'check your understanding' online tutorials, formative quizzes, labelling tasks, and using Complete Anatomy software (available for free via MQ Library).

2. Classes

Please make your choice for practical/workshop classes on E-student. You can only attend the classes according to your class registration. Under exceptional circumstances, lab/tutorials times may be changed, with a written approval from the Unit Convenor. Participation in laboratory practicals and tutorials is highly encouraged for optimal performance in the unit as all scheduled activities are positively aligned with the unit learning outcomes and assessments.

3. Recommended Readings and Materials

The unit iLearn website can be accessed through the ilearn.mq.edu.au. The iLearn will contain all important study materials and links, such as:

- Unit Guide, Timetable
- Leganto link - you can access all relevant online resources available via MQ Library, e.g. textbooks, Complete Anatomy software, Acland’s Video Atlas
- Unit Manual - please download it, print and bring your own copy to the labs and tutorials
- Lecture slides and ECHO30 link to lecture recordings
- Tutorial slides
- Formative learning activities - you have plenty of additional learning materials specifically developed to address weekly learning outcomes keeping in mind the specific format of the unit assessment; we highly encourage you using these regularly and in smaller chunks


Software: Complete Anatomy (Elsevier) is available for free download and Acland’s Video Atlas is available via MQ Library. Instructions will be provided via iLearn.

4. Technology Used

Active participation in learning activities throughout the unit will require students using a laptop or similar device. Students who don't own their laptop/computer may borrow one from the university library.

Unit Schedule

Please note that this timetable may be a subject to change. Please refer to the latest timetable version in iLearn.

ANAT1002-S1-2024 TIMETABLE

<table>
<thead>
<tr>
<th>WEEK</th>
<th>START DATE</th>
<th>LECTURE</th>
<th>TUTORIAL</th>
<th>PRACTICAL LAB</th>
<th>QUIZ DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>19/02</td>
<td>Introduction, UL overview, Shoulder Girdle, Arm</td>
<td>1.5h TUESDAY RECORDED VIA ECHO360</td>
<td>2h THURSDAY F2F per enrolment</td>
<td>23/02/24</td>
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<tr>
<td></td>
<td></td>
<td>Compulsory online modules: Lab Induction, Academic Integrity</td>
<td>F2F LAB per enrolment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>26/02</td>
<td>Elbow, Forearm, Wrist</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>04/03</td>
<td>Hand, UL Neurovasculature</td>
<td>TUT 1: Shoulder region</td>
<td>LAB 2: Elbow, Forearm, Wrist</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Quiz 2</td>
<td>Open: 08/03 Close: 15/03</td>
</tr>
<tr>
<td>4</td>
<td>11/03</td>
<td>UL Neurovasculature, Revision</td>
<td>TUT 2: Arm, Elbow, Forearm</td>
<td>LAB 3: Hand, UL Neurovasculature</td>
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<td></td>
<td></td>
<td>Quiz 3</td>
<td>Close: 22/03</td>
</tr>
<tr>
<td>5</td>
<td>18/03</td>
<td>UL Revision</td>
<td>TUT 3: Hand, UL Neurovasc.</td>
<td>LAB 4: Revision MOCK PRAC EXAM</td>
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<td>Quiz 4</td>
<td>Open: 22/03 Close: 28/03</td>
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| 6 | 25/03 | LL overview, Gluteal Region, Hip, Thigh | TUT 4: UL Revision & Innerv. | PRAC EXAM 1 (15%) | Quiz 5  
|   |   |   |   |   | Open: 28/03  
|   |   |   |   |   | Close: 05/04 |
| 7 | 01/04 | Knee, Leg, Intro to Foot |   | LAB 5: Gluteal, Hip, Thigh | Quiz 6  
|   |   |   |   |   | Open: 05/04  
|   |   |   |   |   | Close: 12/04 |
| 8 | 08/04 | Ankle, Foot | TUT 5: Hip, Thigh | LAB 6: Knee, Leg |   |
|   |   |   |   |   |   |
| 15/04 - 28/04 |   | TWO-WEEK RECESS |   |   |   |
| 9 | 29/04 | LL Neurovasculature | TUT 6: Knee, Leg | LAB 7: Ankle, Foot, LL Neurovasculature | Quiz 7  
|   |   |   |   |   | Open: 03/05  
|   |   |   |   |   | Close: 10/05 |
| 10 | 06/05 | Back 1 | TUT 7: Ankle, Foot, Neurovasc. | LAB 8: Back, Trunk | Quiz 8  
|   |   |   |   |   | Open: 10/05  
|   |   |   |   |   | Close: 17/05 |
| 11 | 13/05 | Back 2, Trunk Wall | TUT 8: Back | LAB 9: Revision MOCK PRAC EXAM | Quiz 9  
|   |   |   |   |   | Open: 17/05  
|   |   |   |   |   | Close: 24/05 |
| 12 | 20/05 | LL & Back Revision, Embryology |   | PRAC EXAM 2 (20%) | Quiz 10  
|   |   |   |   |   | Open: 24/05  
|   |   |   |   |   | Close: 31/05 |
| 13 | 27/05 | Online activities for Final Exam preparation | TUTORIAL 9 MOCK FINAL EXAM |   |   |

**Policies and Procedures**

Macquarie University policies and procedures are accessible from [Policy Central](https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](https://policies.mq.edu.au)
- [Academic Integrity Policy](https://policies.mq.edu.au)
- [Academic Progression Policy](https://policies.mq.edu.au)
Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

**Student Code of Conduct**

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

**Results**

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

**Academic Integrity**

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

**Student Support**

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

**The Writing Centre**

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module
The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support
Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries
Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help
For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University’s IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

INCLUSION AND DIVERSITY
Social inclusion at Macquarie University is about giving everyone who has the potential to benefit from higher education the opportunity to study at university, participate in campus life and flourish in their chosen field. The University has made significant moves to promote an equitable, diverse and exciting campus community for the benefit of staff and students. It is your responsibility to contribute towards the development of an inclusive culture and practice in the areas of learning and teaching, research, and service orientation and delivery. As a member of the Macquarie University community, you must not discriminate against or harass others based on their sex, gender, race, marital status, carers’ responsibilities, disability, sexual orientation, age, political conviction or religious belief. All staff and students are expected to display appropriate behaviour that is conducive to a healthy learning environment for everyone.

PROFESSIONALISM
In the Faculty of Medicine, Health and Human Sciences, professionalism is a key capability
embedded in all our courses.

As part of developing professionalism, students are expected to attend all small group interactive sessions including clinical, practical, laboratory, work-integrated learning (e.g., PACE placements), and team-based learning activities. Some learning activities are recorded (e.g., face-to-face lectures), however you are encouraged to avoid relying upon such material as they do not recreate the whole learning experience and technical issues can and do occur. As an adult learner, we respect your decision to choose how you engage with your learning, but we would remind you that the learning opportunities we create for you have been done so to enable your success, and that by not engaging you may impact your ability to successfully complete this unit. We equally expect that you show respect for the academic staff who have worked hard to develop meaningful activities and prioritise your learning by communicating with them in advance if you are unable to attend a small group interactive session.

Another dimension of professionalism is having respect for your peers. It is the right of every student to learn in an environment that is free of disruption and distraction. Please arrive to all learning activities on time, and if you are unavoidably detained, please join activity as quietly as possible to minimise disruption. Phones and other electronic devices that produce noise and other distractions must be turned off prior to entering class. Where your own device (e.g., laptop) is being used for class-related activities, you are asked to close down all other applications to avoid distraction to you and others. Please treat your fellow students with the utmost respect. If you are uncomfortable participating in any specific activity, please let the relevant academic know.

The study of human anatomy at Macquarie University is governed by the Anatomy Act (1977) and students are admitted to the anatomy laboratories on the proviso that they comply with all relevant legislation. It is important that this includes respect and professionalism in your dealings with human material and your interactions with your colleagues and members of the public. Donating one’s body to science is an act of selflessness and generosity that contributes greatly to advancing medical research and education. It behoves us all, therefore, to treat the donations with utmost care, respect and professionalism. Failure to do so not only can result in serious reputational consequences for you and the University, but can result in suspension, expulsion and possible imprisonment. Please behave professionally at all times and treat our valuable human anatomy teaching resources with utmost care and respect. Thank you.

Unit information based on version 2024.02 of the Handbook.