

ANAT1521-2111

Introductory Anatomy

Course Outline

Term 2, 2023

**School of Medical Sciences
Faculty of Medicine & Health**

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1. Staff

Position	Name	Consultation times and locations	Contact Details
Course Convenor	Dr Tom Duncan	Appointment and consultation should be arranged by Email	t.duncan@unsw.edu.au
Co-convenor	Dr Amaneh Mohammadiroushandeh	Appointment and consultation should be arranged by Email	a.mohammadiroushandeh@unsw.edu.au

The course email address is introanatomy@unsw.edu.au

Please email from your **official UNSW student account**, include your **student number, course code** and state the **reason for your email** clearly. Except for questions of private/personal context, all questions/queries preferably should be posted in Teams.

2. Course information

Units of credit: 6

Pre-requisite(s) for ANAT1521: Prerequisite: BABS1201 or DPST1051

This course is restricted to students enrolled in Medical Science (3991) program

Pre-requisite(s) for ANAT2111: A pass in BABS1201 or DPST1051 plus either a pass in ANAT2241 or BABS1202 or DPST1052 or BABS2202 or BABS2204 or BIOC2201 or BIOC2291 or BIOS1101 or HESC1501 or PHSL2101 or PHSL2121 or VISN1101

Teaching times and locations:

<http://timetable.unsw.edu.au/2023/ANAT1521.html>

<http://timetable.unsw.edu.au/2023/ANAT2111.html>

2.1 Course summary

Introductory Anatomy is the foundation course for all advanced (Level III) gross anatomy courses at UNSW: Visceral Anatomy (ANAT3121), Anatomy of Head and Neck (ANAT3131), Functional Anatomy of Limbs (ANAT3141; ANAT2451) and Neuroanatomy (ANAT3411). A number of other courses offered by anatomy compliment these gross anatomy offerings: Histology: Basic and Systematic (ANAT2241) and Embryology: Early and Systematic Development (ANAT2341). More generally, anatomy courses compliment the subjects offered by other areas within the School of Medical Science (i.e. Physiology,

Pharmacology, Pathology and Health and Exercise Science) as well as courses taught in biological science, biomolecular science and genetics, psychology, biomechanics, vision science, food science and nutrition, medical microbiology and immunology, and engineering.

2.2 Course aims

This course provides students with an understanding of the structure and organisation of the human body as it relates to function.

This course provides an introduction to the topographical anatomy of the whole human body, based on the study of prosected human specimens. Topics for study include: general topographical and descriptive anatomy, and musculoskeletal, nervous, cardiovascular, special sensory organ, respiratory, digestive, urinary, and reproductive systems.

This course is designed for students who require the broad study of human anatomy, as well as those who wish to proceed to Level III studies or a major in Anatomy.

2.3 Course learning outcomes (CLO)

At the end of the course, students will be able to:

1. Demonstrate an understanding of the ethical considerations, and good practice of, working with human cadaveric tissue.
2. Demonstrate understanding by applying the appropriate use of the anatomical terminology of body planes, relations, movement, and cavities.
3. Relate and integrate the following body systems and their components: musculoskeletal, nervous, cardiovascular, special sensory organ, respiratory, digestive, urinary, and reproductive systems.
4. Examine and explain the interdependence of body systems.

The University of NSW has developed a list of attributes which its graduates should possess upon graduation (the 'graduate attributes'). This course has been designed to help students to develop these capabilities. Students completing the course will have gained knowledge and skills that contribute to directly to them acquiring these attributes during their study at UNSW. One way this has occurred is through curriculum mapping of this course.

See medicalsciences.med.unsw.edu.au/students/undergraduate/advice-students#graduate

2.4 Relationship between course learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Related Tasks & Assessment
CLO 1	Demonstrate an understanding of the ethical considerations, and good practice of, working with human cadaveric tissue.	Continuous Assessments
CLO 2	Demonstrate understanding by applying the appropriate use of the anatomical terminology of body planes, relations, movement, and cavities.	Continuous Assessments Mid-Term and End-Term Spot Tests Final Theory Exam
CLO 3	Relate and integrate the following body systems and their components: musculoskeletal, nervous, cardiovascular, special sensory organ, respiratory, digestive, urinary, and reproductive systems.	Continuous Assessments Mid-Term and End-Term Spot Tests Final Theory Exam
CLO 4	Examine and explain the inter-dependence of body systems.	Continuous Assessments Mid-Term and End-Term Spot Tests Final Theory Exam

3. Strategies and approaches to learning

3.1 Learning and teaching activities

Seminar - Students are required to attend the seminar via Teams. Watching the seminar is critical to prepare for the weekly lab. The seminar presents essential concepts and theoretical details on specific topics throughout the course.

Laboratory practicals - The purpose of weekly practical session is to give students first-hand experience of the content covered. During the 3-hour session, students are involved in active learning to identify the anatomical structures, making connections of their features and relations, and to discuss the concepts relevant to the topics studied. The Anatomy Laboratory is a privileged space provided to students learning anatomy, where students are allowed to explore prosected (professionally dissected) specimens, as well as human bones, models, plastinated specimens and cross-sectional slices. Students will be led to work in small groups, guided by teaching staff, to consolidate their knowledge using problem-solving approaches.

Self-directed learning activities - The purpose of weekly online self-directed activities is to help students revise the content covered and studied in the course by engaging in various online learning

materials. During these activities, students will review and check their understanding of the anatomical structures and the relevant concepts. The revision quiz is a formative (non-graded) assessment designed to be interactive and helpful for revising the weekly content. All self-directed learning activities aim to assist students independently assess their performance.

Teams Question forums - A question forum of Teams is provided for students to ask any topic related questions (any questions containing personal information please email the convenors directly). This forum is a place for students to submit questions and interact with other students by answering questions. This forum will be monitored by academic staff, but it is expected that students contribute by answering the questions posted.

Tutorial - Students are required to attend the tutorial via Teams. Watching the tutorial is critical to consolidate knowledge of structures and concepts learned during the week. prepare for the weekly lab. In the tutorial more challenging concepts will be discussed, and a review of the weekly continuous assessments will be provided, with an opportunity for feedback. The tutorial is also an opportunity to discuss questions from the forum.

Independent study - There is insufficient time in the scheduled classes for you to develop a deep understanding of the concepts covered in this course. To achieve the learning outcomes that will be assessed, students will need to revise the material presented in the course regularly and do additional reading beyond the lecture materials to learn effectively. Relevant additional resources, including textbook chapters, will be cited in lecture and practical sessions.

3.2 Expectations of students

Students are reminded that UNSW recommends that a 6 units-of-credit course should involve about 120 hours of study and learning activities. The formal learning activities total approximately 60 hours throughout the term. This is a blended learning course (i.e. has both face-to-face and online learning activities) consisting of 6 hours per week of formal scheduled learning activities:

- 2-hour seminar
- 3-hour lab practical class
- 1-hour tutorial

Your attendance at seminars, labs, tutorials, and completion of self-directed activities and assessments is important. It is expected that you complete all these activities. There will be no “make-up” sessions for any missed activities.

Before starting this course, students MUST complete the online modules listed as compulsory in Week 0 of the course Moodle site.

4. Course schedule and structure

The workflow of a typical week includes the following activities:

1. **Seminar** – Monday 9am-11am

Students will attend via Teams. A recording will also be made available for re-watching.

2. **Laboratory Practicals** – Thursday 11am-2pm *or* Thursday 2pm-5pm

Students will attend the one lab for which they are timetabled, located in Lab 7, Floor 1, Biological Sciences North Building.

3. **Continuous Assessment** – Opens Thursdays 1:45pm *or* 4:45pm

Each week a short multiple-choice assessment must be completed in the final 15 mins of the lab via the Moodle site. Students will have one attempt at this assessment.

4. **Self-Directed Learning Activities** – Self-paced each week

Available on the course Moodle site.

5. **Question Forums** – Always open

Students can post and/or answer questions at any time via the Teams Question Forums.

6. **Tutorial** – Friday 11am-12pm

Students will attend via Teams.

A full timetable is provided on the next page.

COURSE COMPONENT	SEMINAR	LAB	CONTINUOUS ASSESSMENT Related CLO 1-4	SELF-DIRECTED ACTIVITIES	TUTORIAL
DAY & TIME	Monday 9am-11am	Thursday 11am-2pm or 2pm-5pm	Thursday 1:45pm or 4:45pm	Self-paced each week	Friday 11am-12pm
MODE OF DELIVERY	TEAMS	IN PERSON Biological Sciences, Floor 1, Anat lab 07	IN PERSON on MOODLE	MOODLE	TEAMS
Week 0	COMPULSORY "WEEK 0" ACTIVITY - COMPLETE BEFORE WEEK 1				
Week 1		Skeletal System			
Week 2		Muscular System			
Week 3		Cardiovascular System			
Week 4		Respiratory System			
Week 5		Digestive System			
Fri 30th June 3pm-5pm	Mid Term Spot Test. Related CLO 2-4				
Week 6	Flexi Week				
Week 7		Urinary and Reproductive Systems			
Week 8		Central Nervous System			
Week 9		Peripheral Nervous System			
Week 10		Special Senses			
Fri 4th Aug 3pm-5pm	End Term Spot Test. Related CLO 2-4				
5 Aug - 10 Aug	Study Period				
11 Aug - 24 Aug	Final Exam Period. Related CLO 2-4				

**Supplementary Exam Period: 4th Sept – 8th Sept 2023*

5. Assessment

5.1 Assessment tasks

Continuous Assessments

These comprise online activities that encompass both the identification of structures as well as theoretical concepts. The assessments are released on Moodle in the final 15 minutes of each weekly lab. Students must sit this assessment from within the lab. No resits or supplementary continuous assessments will be provided.

Mid-Term and End-Term Spot Test

These are short assessments that cover content delivered in each half of the term. These assessments encompass the identification of structures as well as some theoretical concepts.

Final Theory Exam

A single 2-hour theory exam is worth 30%, and it will be held during the formal examination period. It assesses student knowledge of the course content and deeper understanding (such as the ability to make connections between ideas or to assess capacity for problem-solving). The written exam comprises of multiple-choice and short/long answer questions and will test knowledge obtained from seminars, lab practicals and tutorials.

Please note:

Final exam period for Term 2, 2023 is 11th-24th August 2023.

Supplementary exam period for Term 2, 2023 is 4th-8th September 2023.

Access to previous exam papers

Past exam papers are not available to students. Sample questions are published via Moodle.

Assessment task	Length	Weight	Due date and time
Assessment 1: Continuous Assessment	3 minutes	30%	End of each weekly lab
Assessment 2: Mid-Term Spot Test	50 minutes	20%	Week 5 - Friday 30 th June 3-5pm
Assessment 3: End-Term Spot Test	50 minutes	20%	Week 10 - Friday 4 th August 3-5pm
Assessment 4: Final Theory Exam	2 hours 15 minutes	30%	Final exam period 11 th -24 th August 2023

Further information

UNSW grading system: <https://student.unsw.edu.au/grades>

UNSW assessment policy: <https://student.unsw.edu.au/assessment>

5.2 Assessment criteria and standards

Assessment standards will be discussed in the lead up to each assessment.

5.3 Submission of assessment tasks

Late Submission

UNSW has standard late submission penalties as outlined in the UNSW Assessment Implementation Procedure, with no permitted variation. All late assignments (unless extension or exemption previously agreed) will be penalised by 5% of the maximum mark per day (including Saturday, Sunday and public holidays). For example, if an assessment task is worth 30 marks, then 1.5 marks will be lost per day (5% of 30) for each day it is late. So, if the grade earned is 24/30 and the task is two days late the student receives a grade of 24 – 3 marks = 21 marks.

Late submission is capped at 5 days (120 hours). This means that a student cannot submit an assessment more than 5 days (120 hours) after the due date for that assessment.

Special Consideration

If you experience a short-term event beyond your control (exceptional circumstances) that impacts your performance in a particular assessment task, you can apply for Special Considerations.

You must apply for Special Consideration **before** the start of your exam or due date for your assessment, except where your circumstances of illness or misadventure stop you from doing so.

If your circumstances stop you from applying before your exam or assessment due date, you must **apply within 3 working days** of the assessment, or the period covered by your supporting documentation.

Failure to complete an assessment

In case if you miss any part of your assessment due to misadventure or illness, an application for Special Consideration should be lodged online in myUNSW before the assessment is due.

Failure to sit a test or exam without lodgment of an application for **Special Consideration** will lead to automatic failure of the test. An absence from a test or exam must be supported by a medical certificate or other document that clearly indicates you were unable to be present. That certificate should be dated the same day as the examination. See <https://student.unsw.edu.au/special-consideration>

Should you require adjustments for a disability, please see the Equitable Learning Services: <https://student.unsw.edu.au/els>

5.4 Feedback on assessment

Feedback on Continuous assessments will be provided in the weekly tutorials. Feedback on Mid-term and End-term spot test will be provided shortly after the release of the grades.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at

<https://student.unsw.edu.au/referencing>

***Academic integrity** is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage.¹ At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.*

Further information about academic integrity and **plagiarism** can be located at:

- The Current Students site <https://student.unsw.edu.au/plagiarism>, and
- The ELISE training site <https://subjectguides.library.unsw.edu.au/elise>

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>

7. Readings and resources

Textbook: Marieb EN, Wilhelm PB & Mallat J (2017). *Human Anatomy, 8th ed.*, Pearson.

Atlas: Logan BM (2016). *Logan's Illustrated Human Anatomy, 1st ed.*, CRC press.

3D Atlas: Complete Anatomy. <https://3d4medical.com/> Registration instructions are on the Moodle site.

Other books that are useful and may be used as texts instead (available in the Library):

- Snell, R. (2012). *Clinical Anatomy by Systems, 9th ed.*, Lippincott, Williams and Wilkins.
- Drake, R. et al. (2014). *Gray's Anatomy for Students, 3rd ed.*, Churchill Livingstone (ONLINE)
- Moore, K. & Dalley, A. (2018). *Clinically Oriented Anatomy, 8th ed.* Wolters Kluwer.
- Tortora, G.J. and B.H. Derrickson (2018). *Tortora's Introduction to the Human Body, 11th ed.* John Wiley & Sons Australia Ltd.

See also medalsciences.med.unsw.edu.au/students/undergraduate/learning-resources

1 International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

8. Administrative matters

Student enquiries should be submitted via student portal <https://portal.insight.unsw.edu.au/web-forms/>

9. Additional support for students

- The Current Students Gateway: <https://student.unsw.edu.au/>
- Academic Skills and Support: <https://student.unsw.edu.au/academic-skills>
- *Student Wellbeing and Health* <https://www.student.unsw.edu.au/wellbeing>
- UNSW IT Service Centre: <https://www.myit.unsw.edu.au/services/students>
- *UNSW Student Life Hub*: <https://student.unsw.edu.au/hub#main-content>
- *Student Support and Development*: <https://student.unsw.edu.au/support>
- *IT, eLearning and Apps*: <https://student.unsw.edu.au/elearning>
- *Student Support and Success Advisors*: <https://student.unsw.edu.au/advisors>
- *Equitable Learning Services (Formerly Disability Support Unit)*: <https://student.unsw.edu.au/els>
- *Transitioning to Online Learning* <https://www.covid19studyonline.unsw.edu.au/>
- *Guide to Online Study* <https://student.unsw.edu.au/online-study>

10. Ethical behaviour and human remains

In this course, you will be required to study human anatomical specimens. Each year, people donate their bodies to UNSW via a Bequeathal Program so that you and your colleagues can learn about the human body. The donations are provided through the extraordinary generosity of the public (our donors and their families). This is a special privilege afforded very few people. By law, responsibility to the donor and their family members, and as a matter of good ethical practice you must treat all human remains with great respect and care (see below). The University operates the Bequeathal Program under the Code of Practice noted below, which all students are required to adhere to.

Code of Practice:

The University recognises the magnitude of the contribution made by those who donate their bodies for the teaching of anatomy, and it is committed to treating the human remains entrusted to its care with the utmost respect and professionalism. In keeping with this commitment, the University requires its employees and students to uphold all legal, public health, and ethical standards associated with the handling of bodies and human tissue samples. Any activity which undermines its ability to meet UNSW's legislative obligations, or which devalues the contribution made by those who donate their bodies for the purposes of the teaching of anatomy to students will be in breach of this policy and subject to further action.

For those engaging in the online space (learning and teaching), the University considers that the Code of Practice remains relevant. The use of images of anatomical specimens should follow principles consistent with the Anatomy Act 1977 and/or Human Tissue Act 1983. When images are used online, these should never be identifiable, caricatured and shared for any purpose other than educational; and should not be published on social media platforms.

See medicalsciences.med.unsw.edu.au/students/undergraduate/advice-students#Practicals

11. Student risk assessments

Medicine and Science Teaching Laboratory		Anatomy Practical Classes for Medical and Science Students D26 Ian Jacobs Building L1 LAB08A/07
Student Risk Assessment		

Hazards	Risks	Controls
Chemical Formaldehyde Methylated spirits 2-phenoxyethanol Physical Cold temperature Heavy and sharp models (e.g. bone/plastic) Biological Fungi Bacteria (tetanus) Hepatitis B and C	Corrosive Flammable Irritant Cold Penetrating wound or foot injury Infection	<ul style="list-style-type: none"> Low concentrations of chemicals used Adequate air changes and ventilation provided Safety Data Sheets for chemicals available <ul style="list-style-type: none"> Always wear a laboratory coat Wear enclosed shoes with full coverage of dorsum of foot Wear protective eyewear <ul style="list-style-type: none"> Ensure appropriate immunisation is current Wear a face mask (if required) Wear disposable gloves when handling wet specimens and do not cross-contaminate models or bones with wet specimens Do not bring in any food or drinks Do not place anything into your mouth (e.g. pen) Use disinfectant provided for cleaning models and surfaces Use hand sanitisers provided regularly Wash hands with soap and dry thoroughly before leaving

Personal Protective Equipment (required)

 <div style="background-color: #0056b3; color: white; padding: 2px 5px; font-weight: bold;">Lab. Coat</div>	 <div style="background-color: #0056b3; color: white; padding: 2px 5px; font-weight: bold;">Closed in footwear</div>	 <div style="background-color: #0056b3; color: white; padding: 2px 5px; font-weight: bold;">Safety Glasses</div>	 <div style="background-color: #0056b3; color: white; padding: 2px 5px; font-weight: bold;">Gloves</div>	 <div style="background-color: #0056b3; color: white; padding: 2px 5px; font-weight: bold;">Mask</div>
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Emergency Procedures

In the event of an alarm, follow the instructions of the academic in charge. The initial sound (beep) is advising you to prepare for evacuation. During this time pack up your personal belongings. The second sound (whoop) gives instruction to leave. The assembly point is on the lawn in front of the Chancellery. In the event of an injury inform the academic in charge (and/or lab staff). First aider and fire warden contact details are on display by the lifts on the floor and in each room. There are portable First Aid Kits located in LAB08A and LAB07.

- Clean up and waste disposal**
- Cover wet specimens with the towels provided. Make sure that towels do not hang over the edge of the table as this may result in fluid dripping onto the floor. Fluids on the floor are a major safety hazard and should be reported to lab staff immediately.
 - Replace stools under the tables (if applicable).
 - Remove your gloves and dispose in the biowaste bins provided.
 - Wash your hands thoroughly with soap and dry with paper towels provided.
 - Remove your laboratory coat as you leave the room.

Ethics Approval

This type of practical has been previously considered and approved by the UNSW Human Research Ethics Advisory Panel (HC180115).

Declaration

I have read and understand the safety requirements for this practical class, and I will observe these requirements.

Signature:..... **Date:**.....

Student number:

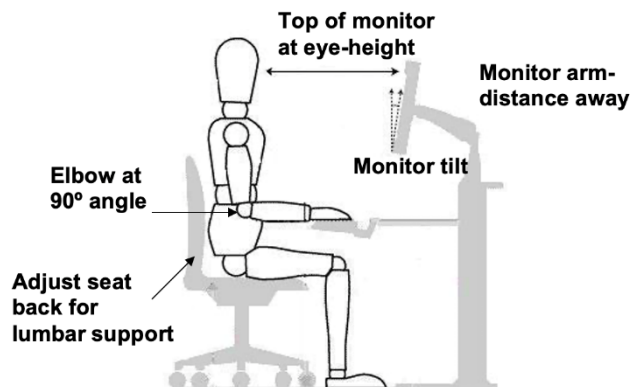
ANAT-SRA-Med&SciStudent relates to RA-MED-06. Date for review: 01/02/2024



Hazards

Ergonomics	Musculoskeletal pain	<ul style="list-style-type: none"> • Correct workstation set-up • Check electrical equipment is in good condition before use • All portable electrical equipment tested and tagged • Disinfectants and wipes available for use before and after the practical
Electrical	Electrical shock/Fire	
Biological	Infection	

Workstation set-up



Personal Protective Equipment

Face masks may be required. Please follow the instructions provided at the time of entry.

Emergency Procedures

In the event of an alarm, follow the instructions of the academic in charge. The initial sound (beep) is advising you to prepare for evacuation. During this time pack up your personal belongings. The second sound (whoop) gives instruction to leave. The assembly point is on the lawn in front of the Chancellery. In the event of an injury inform the academic in charge (and/or lab staff). First aider and fire warden contact details are on display by the lifts on the floor and in each room. There is a wall mounted First Aid Kit located at the end of the G06 or a portable kit in the 08A Laboratory.

Clean up and waste disposal

No apparatus or chemicals used in these rooms.

I have read and understand the safety requirements for this practical class, and I will observe these requirements.

Signature:..... Date:.....

Student number: