

ANAT1521-2111

Introductory Anatomy

Course Outline

Term 2, 2022

School of Medical Sciences
Faculty of Medicine & Health

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1. Staff

Position	Name	Email	Consultation times and locations
Course Convenor	Dr Tom Duncan	t.duncan@unsw.edu.au	Arranged via email
Co-convenor	Dr Ghaith Al-Badri	g.al-badri@unsw.edu.au	Arranged via email
Lecturer	Dr Tom Duncan		
Lecturer	Dr Ghaith Al-Badri		

2. Course information

Units of credit: 6

Pre-requisite(s) for ANAT1521: 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/2022/ANAT1521.html>

<http://timetable.unsw.edu.au/2022/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 aims provide 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 skeletal, muscular, cardiovascular, respiratory, digestive, urinary, reproductive, nervous, and special sensory organ 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 the appropriate use of anatomical terminology
3. Demonstrate an understanding of the structure and function of the following body systems and their components: musculoskeletal, nervous, cardiovascular, special sensory organ, respiratory, digestive, urinary, and reproductive system of the human body.
4. Demonstrate an understanding of the inter-dependence 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 medsciences.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 Assessment Mid-Term Spot Test and End-Term Spot Test
CLO 2	Demonstrate the appropriate use of anatomical terminology	Continuous Assessment Mid-Term Spot Test and End-Term Spot Test Final Theory Exam
CLO 3	Demonstrate an understanding of the structure and function of the following body systems and their components: musculoskeletal, nervous, cardiovascular, special sensory organ, respiratory, digestive, urinary, and reproductive system of the human body.	Continuous Assessment Mid-term Spot Test and End-term Spot Test Final Theory Exam
CLO 4	Demonstrate an understanding of the inter-dependence of body systems.	Continuous Assessment Mid-Term Spot Test End-Term Spot Test and Final Theory Exam

3. Strategies and approaches to learning

3.1 Learning and teaching activities

Lecture - Students are required to attend the lecture via Teams. Watching the lecture is critical to prepare for the weekly lab. The lectures aim to present essential concepts and theoretical details on specific topics throughout the course.

Laboratory practicals - The purpose of weekly practical sessions is to give students first-hand experience of the content covered. During these two two-hour weekly sessions, students will identify the gross anatomical structures and their features, practice anatomical terminology and discuss the concepts studied in preparation to the weekly topic. The anatomy laboratory is the best resource to

learn anatomy and is a wonderful place of privilege, discovery and discussion. The gross anatomy laboratory sessions are small group sessions that allow students to explore prosected (professionally dissected) specimens of the human cadaveric material. Although, the tutor is present to guide you through the activities in these sessions, these sessions are meant to be led by students. Working in small teams, you will be consolidating content and apply problem-solving approach. It is also a good opportunity to discuss with peers and teaching staff difficult topics and receive an informal feedback. For those unable to attend in person, recordings of the demonstration will be made available.

Question forums - Each week there will be a question forum for students to ask any topic related questions (any questions containing personal information please email the convenors directly). These forums are a place for students to submit questions and interact with other students by answering questions. These forums will be monitored by academic staff, but it is expected that students answer most questions posted.

Self-directed learning activities - The purpose of these weekly activities is to help students interact with the content covered. During these activities students will identify the gross anatomical structures and their features. These revision activities allow you to informally check your understanding of the content as well as to independently assess your performance. These activities aim to assist with learning terminology and grasping difficult concepts.

Formative Activities – These non-graded assessments are a good way to check your understanding of a topic. They feature a series of interactive questions based on applying the content covered in lectures and laboratory sessions and are a useful resource in consolidating and revised course content. Sessions are structured to encourage student participation in these activities and to enhance your learning. You will benefit most if you undertake these activities consistently.

Independent study - There is insufficient time in the lectures and practicals for you to develop a deep understanding of the concepts covered in this course. In order for you to achieve the learning outcomes that will be assessed, you will need to revise the material presented in the course regularly. You will probably also need to do additional reading beyond the lecture materials in order 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:

- One 2-hour lecture
- 2 hours of lab practical classes
- 2 hours of self-directed revision activities – short videos, readings, and online activities

Your attendance at lectures and labs, reviewing of videos and online activities, and completion of 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. **Lecture** – Monday 11am-1pm – students will attend via Teams. A recording of the lecture will also be made available for re-watching
2. **Laboratory practicals** – students will attend *one* in-person lab in Biological sciences North, Floor 1
 - a. Labs for ANAT2111 occur Monday 1pm-3pm (Lab7) or Friday 4pm-6pm (Lab8)
 - b. Labs for ANAT1521 occur Thursday 9am-11am (Lab8) or Thursday 11am-1pm (Lab8)
3. **Online self-directed learning activities** – available via Moodle and include additional videos and labelling activities.
4. **Question forums** – At any time during the week students should post and/or answer questions in weekly topic forums on Moodle.
5. **Continuous Assessment** – Each week a short multiple-choice assessment must be completed. Students have one attempt at this assessment, which is open every week from Monday 9am until Friday 9am.

	COURSE COMPONENT	LECTURE	ANAT2111 LAB	ANAT1521 LAB	SELF-DIRECTED ACTIVITIES	CONTINUOUS ASSESSMENT	SCHEDULED ASSESSMENTS
	DATE & TIME	Monday 11am-1pm	Monday 1pm-3pm or Friday 4pm-6pm	Thursday 9am-11am or Thursday 11am-1pm	Self-paced each week	Completed each week between Monday 9am - Friday 9am	Friday 9am
Week	MODE OF DELIVERY	TEAMS	IN PERSON Biological sciences North, Floor 1, Anat lab 07 (Mon) or 08A (Fri)	IN PERSON Biological sciences North D26, Floor 1, Anat lab 07	MOODLE	MOODLE	MOODLE
0	Students are REQUIRED TO COMPLETE online tasks available in "WEEK 0" folder on Moodle BEFORE Week 1						
1	30/05-03/06	Skeletal system	Skeletal system	Skeletal system	Skeletal system	Skeletal system	
2	06/06-10/06	Muscular system	Muscular system	Muscular system	Muscular system	Muscular system	
3	13/06-17/06	Cardiovascular system <i>PRE-RECORDED</i>	Cardiovascular system <i>NO MONDAY LAB</i>	Cardiovascular system	Cardiovascular system	Cardiovascular system	
4	20/06-24/06	Respiratory system	Respiratory system	Respiratory system	Respiratory system	Respiratory system	
5	27/06-01/07	Digestive system	Digestive system	Digestive system	Digestive system	Digestive system	MID-TERM SPOT TEST
6	04/07-08/07	FLEXI WEEK					
7	11/07-15/07	Urinary and Reproductive systems	Urinary and Reproductive systems	Urinary and Reproductive systems	Urinary and Reproductive systems	Urinary and Reproductive systems	
8	18/07-22/07	Central Nervous System	Central Nervous System	Central Nervous System	Central Nervous System	Central Nervous System	
9	25/07-29/07	Peripheral Nervous System	Peripheral Nervous System	Peripheral Nervous System	Peripheral Nervous System	Peripheral Nervous System	
10	01/08-05/08	Special senses	Special senses	Special senses	Special senses	Special senses	END TERM SPOT TEST
	06/08-11/08	STUDY PERIOD					
	12/08-25/08	FINAL EXAM PERIOD					

**Supplementary Exam Period: 5 September – 9 September*

5. Assessment

5.1 Assessment tasks

- | | |
|--------------------------|-----|
| 1. Mid-Term Spot Test | 20% |
| 2. End-Term Spot Test | 20% |
| 3. Continuous Assessment | 30% |
| 4. Final Theory Exam | 30% |

Continuous Assessments

These comprise online activities that encompass both the identification of structures as well as theoretical concepts. The assessments are released weekly on Moodle, and students are required to complete them within that week. The 7 highest scoring assessment marks will be used to calculate the final grade. No resits or supplementary continuous assessment will be provided.

Mid-Term Spot Test and End-Term Spot Test These are short assessments that cover content delivered in each half of the term. These assessments encompass both the identification of structures as well as theoretical concepts.

Final Theory Exam

A single 2-hour written 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 and laboratories.

Please note:

Final exam period for Term 2, 2022 is 12th-25th August 2022.

Supplementary exam period for Term 2, 2022 is 5th-9th September 2022.

Access to previous exam papers

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

Further information

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

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

5.2 Submission of assessment tasks

Late Submission

Late submissions will be penalized at 5% per day capped at five days (120 hours). Students will not be permitted to submit their assessments after this date.

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>

5.3. Feedback on assessment

Feedback on Mid-term and End-term assessments 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

Prescribed Text: 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.

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.
- Rohen, J., Yokochi, C. & Lütjen-Drecoll, E. (2006). *Color Atlas of Anatomy: A Photographic Study of the Human Body, 6th ed.* Lippincott, Williams and Wilkins.

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

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>

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

- 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:
<p>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.</p>
<p>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.</p>

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

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

Personal Protective Equipment required



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 08A Laboratory.

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 staff immediately.
- Replace stools under the tables (if applicable).
- Remove your gloves and dispose in the biowaste bins provided.
- Wash your hands thoroughly with the soap 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:



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 Foot injury Infection	<ul style="list-style-type: none"> ▪ Low concentrations of chemicals used ▪ Adequate air changes and ventilation are provided ▪ Safety Data Sheets for chemicals available <ul style="list-style-type: none"> ▪ Wear warm clothing as required ▪ Always wear a laboratory coat ▪ Wear long-sleeved surgical gown when working with fresh tissue and embalming ▪ Always wear enclosed shoes with full coverage of the dorsum of the foot ▪ Wear protective eyewear ▪ Use QlickSmart blade removal unit to remove scalpel blades <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 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 the provided hand sanitisers regularly ▪ Wash hands with soap and dry thoroughly before leaving

Personal Protective Equipment required



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. Follow the instructions of the academic in charge and the fire warden regarding the assembly point. 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 near the entrance/exit doors. There is a wall mounted First Aid Kit located near the entrance/exit doors.

Clean up and waste disposal

- Refer to SWP-MED-MED-00093: GASU - Dissecting embalmed cadaveric material and SWP-MED-MED-00094: GASU - Recording and tracking dissection and waste.
- Fluids on the floor are a major safety hazard and should be reported to staff immediately.
- Replace stools under the tables (if applicable).
- Remove your gloves and dispose in the biowaste bins provided.
- Wash your hands thoroughly with the soap and dry your hands with paper towel.
- Remove your lab gown when you leave the Mortuary.

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: