

ANAT 2521 BIOLOGICAL ANTHROPOLOGY: PRINCIPLES AND PRACTICES

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	Contact Details
Course Convenor	Dr. Stanley Serafin	s.serafin@unsw.edu.au	Tuesdays 1-2pm via Teams	Room 210, Level 2 Wallace Wurth (C27)

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 Units of Credit

Pre-requisite(s): There are no prerequisites for the course because all necessary knowledge is included within the course structure. This has been done to make the course appropriate for students with diverse educational backgrounds.

Teaching times and locations are available on http://timetable.unsw.edu.au/2022/ANAT2521.html and on the course Moodle page.

2.1 Course summary

Have you ever wondered why humans vary in the way that we do? Or what that variation tells us about a person, a group of people, or humanity as a whole? Biological anthropology answers these questions. This course introduces students to the field of biological anthropology, which deals with the adaptations, variability, and evolution of human beings and their living and fossil relatives in the context of human culture and behaviour.

2.2 Course aims

The aims of this course are to:

- 1. Provide the student with an understanding of the major biological (physical and evolutionary) attributes of non-human primates and humans.
- 2. Assist the student to develop a deeper appreciation of the place of humans in the natural world and their relationship to other primates.
- 3. Provide the student with some knowledge and skills from the field of biological anthropology.
- 4. Help the student to appreciate the importance and relevance of the study of human origins for an understanding of modern human structure, development and disease.

2.3 Course learning outcomes (CLO)

On successful completion of this course you will be able to:

- 1. Demonstrate an understanding of the fundamental concepts, methods and ethical principles of biological anthropology.
- 2. Apply the basic principles of evolutionary theory in the context of primate evolution and diversity.
- 3. Correlate the anatomy of non-human primates and modern humans and apply this in interpreting the evidence for human evolution.

- 4. Apply the biosocial approach to interpret human biological diversity, its effect on human diet and disease and relate this to modern human societies.
- 5. Apply knowledge of human anatomy and diversity to forensic and bioarchaeological contexts.

2.4 Relationship between course and program learning outcomes and assessments

Course Learning Outcome (CLO)	LO Statement	Related Tasks & Assessment
CLO 1	Demonstrate an understanding of the fundamental concepts, methods and ethical principles of biological anthropology.	 Laboratory Project Assignment Spot Tests (1 and 2) Final Theory Examination
CLO 2	Apply the basic principles of evolutionary theory in the context of primate evolution and diversity.	 Laboratory Project Assignment Spot Tests (1 and 2) Final Theory Examination
CLO 3	Correlate the anatomy of non-human primates and modern humans and apply this in interpreting the evidence for human evolution.	 Laboratory Project Assignment Spot Tests (1 and 2) Final Theory Examination
CLO 4	Apply the biosocial approach to interpret human biological diversity, its effect on human diet and disease and relate this to modern human societies.	 Laboratory Project Assignment Spot Tests (1 and 2) Final Theory Examination
CLO 5	Apply knowledge of human anatomy and diversity to forensic and bioarchaeological contexts.	 Laboratory Project Assignment Spot Tests (1 and 2) Final Theory Examination

3. Strategies and approaches to learning

3.1 Learning and teaching activities

Lectures

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 practical classes

The purpose of weekly laboratory practicals is to give students first-hand experience of the content covered. During these two-hour weekly sessions, students will identify anatomical structures and artifacts, practice anatomical and anthropological terminology, and discuss concepts related to each week's topic. The anatomy laboratory is the best resource to learn human evolutionary anatomy and is a wonderful place of privilege, discovery and discussion. The laboratory practicals are small group sessions that allow students to explore fossil casts, stone tool replicas and real human skeletal remains. Although the instructor 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 problem-solving. It is also a good opportunity to discuss with peers and teaching staff difficult topics and receive informal feedback.

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. Relevant additional resources, such as textbook chapters, videos and research articles, will be cited and/or provided in Moodle and will be discussed in class. In addition, formative self-assessment tasks will be provided to encourage understanding and deep learning.

3.2 Expectations of students

You are reminded that UNSW recommends that a 6 units-of-credit course should involve about 150 hours of study and learning activities. The formal learning activities total approximately 70 hours throughout the term and students are expected (and strongly recommended) to do at least the same number of hours of additional study.

Attendance is important and highly encouraged for satisfactory completion of the course and achieving the learning outcomes. It is expected that a student attends at least 80% of all practical and laboratory classes. Attendance of the laboratory classes and tutorials will be recorded at the start of each class. If absent from a laboratory/tutorial component, students are encourage to notify the course convenorsas soon as possible. When missing an **assessment item**, students are required to submit an **online application via myUNSW for special considerationand** provide evidence of thecause of absence such as medical certificates or other documentation.

The course utilises social learning platforms such as Microsoft Teams. It is expected that you will engage with these platforms in a respectful and professional manner and use your cameras in online practical settings. If you have any concerns about this, please contact the convenor as soon as possible.

Team-based assessments will involve working in small groups inside and outside of class, which will be facilitated via in-person and online activities, including social networks and discussion forums. In order to pass the course, every item of assessment must be attempted.

4. Course schedule and structure

The workflow of a typical week includes the following activities:.

- **1. Reading** students are to do the assigned reading for each week listed in the course outline as well as on Moodle.
- 2. Lectures pre-recorded and available to watch any time online via Moodle.
- **3. Drop-in sessions –** Tuesdays 1-2pm live online via Teams. An optional Q&A drop-in session during which students can ask the course convener questions.
- **4.** Laboratory practicals in-person labs Thursdays 2:00 PM 4:00 PM in Biological Sciences North D26, Level 1, Anat Lab 07. Students will work through the lab manual in small groups.
- **5. Online self-directed learning activities –** available via Moodle and include additional videos and activities.
- **6. Discussion forum** At any time during the week students should post and/or answer questions in course Discussion forum on Moodle.

The full schedule is included below. Any changes to the timetable will be communicated via the course Moodle and Teams.

Please note that the course integrates the use of Moodle and MS Teams. It is suggested that you download the MS Teams app available via UNSW IT before the course commences.

While it is expected that the seminars will be recorded please note that this cannot be guaranteed. It is strongly recommended that students attend all seminars as they form the basis for the practical content for the week, and the continuous assessment.

	ACTIVITY	READING	LECTURE	DROP-IN SESSION	LAB
	DAY & TIME	Self-paced	Self-paced	Tuesday 1-2pm	Thursday 2-4pm
Week	MODE OF DELIVERY		MOODLE	TEAMS	IN PERSON Biological Sciences North D26, Level 1, Anat Lab 07
0	23/05-29/05		Compulsory Week 0 activities	es on Moodle	
1	30/05-05/06	Textbook: Ch 1 Lab Manual: Week 1	Introduction to Biological Anthropology		Osteology
2	06/06-12/06	Textbook Ch 2-5 Lab Manual: Week 2	Evolutionary Theory		Aging & Sexing
3	13/06-19/06	Textbook Ch 14-15 Lab Manual: Week 3	Modern Human Variation		Osteometry
4	20/06-26/06	Textbook Ch 6-7 Lab Manual: Week 4	Living Primates		Primate Comparative Anatomy
5	27/06-03/07	Textbook Ch 8 Lab Manual: Weeks 1-4	Fossil Primates		Spot Test 1
6	04/07-10/07	FLEXIWEEK			
7	11/07-17/07	Textbook Ch 9-10 Lab Manual: Week 7	Early Hominins		Early Hominins
8	18/07-24/07	Textbook Ch 11 Lab Manual: Week 8	The Genus <i>Homo</i>		The Genus <i>Homo</i>
9	25/07-31/07	Textbook Ch 12-13 Lab Manual: Week 9	Emergence of Modern Humans		Oral Presentations
10	01/08-05/08	Readings on Moodle Lab Manual: Week 10	Bioarchaeology & Forensic Anthropology		Bioarchaeology & Forensic Anthropology
	06/08-11/08	STUDY PERIOD			
	12/08-25/08	EXAM PERIOD: Spot Test 2 & Final Theory Exam			

Exam Period: 12 August – 25 August

Supplementary Exam Period: 5 September – 9 September

5. Assessment

5.1 Assessment tasks

Laboratory Project Assignment
 Spot Tests (1 and 2)
 40%

3. Final Theory Examination 40%

Laboratory Project Assignment

Students will conduct the Laboratory Project Assignment in small teams. This assessment has two parts: 1) a written report worth 10% due in Week 4; and 2) an oral presentation worth 10% presented to the class in Week 9.

Spot Tests (1 and 2)

Spot Tests 1 and 2 are each worth 20%. The spot tests assess knowledge learned and skills obtained during lectures and practicals. Spot Test 1 covers the content of the first half of the term while Spot Test 2 focuses on the second half of the term. The format and location of the Spot Tests will be posted on Moodle.

Final Theory Examination

A single 2-hour written exam worth 40% will held during the formal examination period. It assesses student knowledge of 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 multiple choice questions and short answer questions and will test knowledge obtained from lectures and practicals. Final exam period for Term 2 2022 is 12-25 August. Supplementary exam period for Term 2 2022 is 5-9 September.

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.

More information can be found on the **Special Consideration website**.

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 http://subjectquides.library.unsw.edu.au/elise/presenting

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.

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

The School of Medical Sciences will not tolerate plagiarism in submitted written work. The University regards this as academic misconduct and imposes severe penalties. Evidence of plagiarism in submitted assignments, etc. will be thoroughly investigated and may be penalised by the award of a score of zero for the assessable work. Flagrant plagiarism will be directly referred to the Division of the Registrar for disciplinary action under UNSW rules.

Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own. Examples include:

Copying	Using the same or remarkably similar words to the original text or idea without acknowledging the source or using quotation marks. This includes copying materials, ideas or concepts from a book, article, report or other written document, presentation, composition, artwork, design, drawing, circuitry, computer program or software, website, internet, other electronic resource, or another person's assignment, without appropriate acknowledgement.
Inappropriate paraphrasing	Changing a few words and phrases while mostly retaining the original structure and/or progression of ideas of the original, and information without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.
Collusion	Presenting work as independent work when it has been produced in whole or part in collusion with other people. Collusion includes students providing their work to another student before the due date, or for the purpose of them plagiarising at any time paying another person to perform an academic task and passing it off as your own stealing or acquiring another person's academic work and copying it offering to complete another person's work or seeking payment for completing academic work. This should not be confused with academic collaboration.
Inappropriate citation	Citing sources which have not been read, without acknowledging the 'secondary' source from which knowledge of them has been obtained.
Self-plagiarism	'Self-plagiarism' occurs where an author republishes their own previously written work and presents it as new findings without referencing the earlier work, either in its entirety or partially. Self-plagiarism is also referred to as 'recycling', 'duplication', or 'multiple submissions of research findings' without disclosure. In the student context, self-plagiarism includes reusing parts of, or all of, a body of work that has already been submitted for assessment without proper citation.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Undergraduate and Postgraduate Handbooks and are encouraged to seek advice from

7. Readings and resources

Textbook	Jurmain, Robert, Kilgore, Lynn, Trevathan, Wenda, Ciochon, Russell L., Bartelink, Eric. Introduction to Physical Anthropology, 15th Edition, Cengage available from UNSW bookshop & library.		
Software	 Acland's Video Atlas of Human Anatomy (<u>aclandanatomy.com</u>) by Wolters Kluwer, Lippincott Williams & Wilkins) free access is available via UNSW Library 		
RecommendedResources	 France, Diane L. Lab Manual and Workbook for Physical Anthropology, 8th Edition, Cengage. White, Tim D., Folkens, Pieter A. 2005. The Human Bone Manual, Elsevier Inc. Stanford, Craig, Allen, John S., Antón, Susan C. Exploring Biological Anthropology: The Essentials, Pearson. 		
Study Spaces	 Library can be used for on-campus studies Anatomy museum (ground floor of Wallace Wurth East; swipe card entry) provides specimens, Anatomy software and Internet access Wallace Wurth East G06/G07 (swipe card entry) computers with a variety of anatomical software including Virtual Adaptive Anatomy Tutorials Museum of Human Disease medicalsciences.med.unsw.edu.au/students/disciplines/anatomy 		
Moodle	Information about the course and a number of electronic study resources can be accessed via the UNSW Moodle learning management system. You can also access the system via MYUNSW. Support materials are located at student.unsw.edu.au/moodle-support . Lecture notes, access to your grades, course documents and learning activities can be found on Moodle. Communication with the tutors and your groups and teams can also be done there.		
Library	<u>library.unsw.edu.au</u> The Library has a collection of anatomical models available for studies		
Lecture Recordings+	Lecture Recordings+ provides digital audio-visual recordings of lectures that can be accessed via streaming media over the web or as a podcast. Links are provided via Moodle.		
Additional materials	medicalsciences.med.unsw.edu.au/students/undergraduate/learning-resources		
Equipment Required	Laboratory coat, enclosed shoes, facemask and safety glasses are required to be worn in the lab. Personal electronic devices.		

8. Administrative matters

Student enquiries should be submitted via student portal https://portal.insight.unsw.edu.au/web-forms/or via the course email address headandneckanatomy@unsw.edu.au

8.1 General Information

The Department of Anatomy is part of the School of Medical Sciences and is within the Faculty of Medicine & Health. **Professor Nalini Pather** is the Head of Anatomy and appointments to see her may be made through email (N.Pather@unsw.edu.au).

8.2 Communication

All students are advised that email is the official means by which the School of Medical Sciences at UNSW will communicate with you. All email messages will be sent to your official UNSW email address (e.g. z1234567@unsw.edu.au) and, if you do not wish to use the University email system, you MUST

arrange for your official mail to be forwarded to your chosen address. Email correspondence with the University should be from your UNSW email address to reduce identity confusion.

The University recommends that you check your mail at least every other day. Facilities for checking email are available in the School of Medical Sciences and in the University library. Further information and assistance are available from the IT Service Centre (02) 9385 1333.

All current timetables, notices, and information relevant to you will be available on Moodle. It is your responsibility to check Moodle regularly.

8.3 Grievance Resolution Officer

In case you have any problems or grievance about the course, you should try to resolve it with the Course Convenors. If the grievance cannot be resolved in this way, you should contact the School of Medical Sciences Grievance Officer, Prof Nick Di Girolamo (n.digirolamo@unsw.edu.au).

8.4 Student Representatives

Two student representatives from each cohort represent the students in this course on the Department Student-Staff Liaison Committee. These representatives are expected to liaise with course conveners and student cohort, and to meet department committees as required; usually 2 times per term. During these meetings representatives will have the opportunity to report on any feedback relating to the course that has been gathered from peers either verbally or via email. Being a student representative gives you the opportunity to provide a voice for your student cohort, demonstrate your leadership, and is a role that can be listed on your CV.

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

The learning activities in this course is centred around the study of human anatomical specimens that have been preserved and prepared from people who have donated their bodies to UNSW via a Bequeathal Program. Their donation makes it possible for you and your peers to study the human body. This is an extraordinary, generous act of these donors and their families and is a special priviledge. Treating these remains with the utmost care and respect is mandatory, and our responsibility. It is good ethical practice and is mandated by NSW Law. The University operates the Bequeathal Program under the Code of Practice noted below, which all students are required to adhere to.

UNSW Department of Anatomy Code of Practice:

The University and Department of Anatomy recognises the magnitude of the contribution made by those who donate their bodies for the teaching of anatomy. We are committed to treating the human remains entrusted to our 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 and guidelines associated with the handling of human 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.

The Department of Anatomy hosts a thanksgiving service to commemorate those people who donated their bodies to enable our students to study anatomy. Families of donors are invited to attend this special ceremony. Staff and students participate in this event through readings of poetry, music and song, and in the laying of flowers as the name of each donor is read. If you would like to participate in this ceremony, please record your interest by emailing our Bequethal Administrator (bequethal@unsw.edu.au)

11. Student Risk Assessment

Medicine and Science Teaching Laboratory

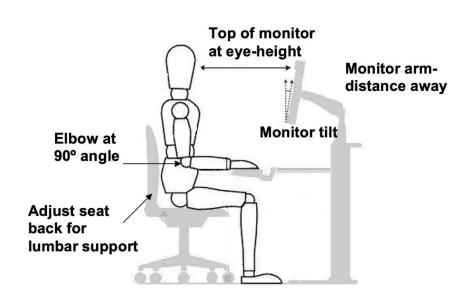


Practical Classes (Dry and Computer) for Medicine and Science Students

Student Risk Assessment

Hazards		
Ergonomics	Musculoskeletal pain	 Correct workstation set-up Check electrical equipment is in good condition before use
Electrical	Electrical shock/Fire	 All portable electrical equipment tested and tagged Disinfectants and wipes available for use before and after the practical
Biological	Infection	

Workstation set-up



Personal Protective Equipment

Face masks may be required. Please following 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 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:

ANAT-SRA-Med&SciStudent relates to RA-MED-06. Date for review: 01/02/2023

Medicine and Science Teaching Laboratory





Anatomy Practical Classes for Medical and Science Students

D26 Ian Jacobs Building Level 1 LAB07 & 08A

Hazards	Risks	Controls
Chemical Formaldehyde Methylated spirits 2-phenoxyethanol	Corrosive Flammable Irritant	 Low concentrations of chemicals used Adequate air changes and ventilation are provided Safety Data Sheets for chemicals available
Physical Cold temperature Heavy and sharp models (e.g. bone/plastic)	Cold Penetrating wound Foot injury	 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
Biological Fungi Bacteria (tetanus) Hepatitis B and C	Infection	 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 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 f requirements.	for this practical class, and I will observe these
Signature: Student number:	