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Semester 1, 2018

ANAT2451
Functional Anatomy for Health and Exercise

Course outline

UNIVERSITY OF NEW SOUTH WALES
CRICOS Provider Code 00098G

ANAT2451: FUNCTIONAL ANATOMY OF THE LIMBS

*It is your responsibility to make sure that you read and sign the **Student Risk Assessment Form** included in this outline before you attend your first prac in the dissecting room. Keep the signed form in your prac manual and bring it to classes with you. It is not necessary to give it to your tutor or Course Convenor).*

Please read this outline in conjunction with the following pages on the School of Medical Sciences website:

- Advice for Students
- Learning Resources

(or see "STUDENTS" tab at medicalsciences.med.unsw.edu.au)

Course Staff

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If you would like an appointment with the teaching staff, please arrange this via email.

Units of Credit and Hours of Study

This course is worth six units-of-credit (6 UOC).

This is a blended learning course (i.e. has both face-to-face and online learning activities) and consists of 7 hours per week of scheduled learning activities. These comprise two hours of lectures, two two-hour practical laboratory and one hour team-based learning sessions, and at least one hour of an online activity each week.

Students are expected to attend all scheduled learning. Please note that for a 6 UOC course, UNSW recommends 150 hours of study and learning activities. The scheduled learning activities in this course consists of approximately 84 hours throughout the semester and students are expected to contribute the remaining number of hours in self-directed learning and study.

What is Anatomy?

Anatomy is derived from the Greek words '*ana' (*meaning to *separate, apart from),* and *'temnein'* (meaning to *cut up, cut open)*. Anatomy, therefore, is the study of body structure or morphology. Anatomy is one of the earliest of the medical sciences and has a colourful and prestigious recorded history that spans some 4000 years, with the earliest documents found in Egypt (the Edwin Smith Papyrus, dated 1600BC).

Many of the earliest known medical scientists and physicians were devoted to understanding anatomy including the Greek physician Hippocrates (460-377BC) who first discovered the tricuspid valve of the heart. This was around the same time that cadavers where first used in anatomical research by Herophilos and Erasistratus in Alexandria, Egypt (4BC) and when the Sushruta Samhita, an Ayurvedic medical text including detailed anatomy descriptions was compiled in India. But by far the most notable of the early anatomists is Galen (2AD) who also compiled much of the anatomical knowledge known to date into what is probably ***the*** first anatomy textbook that reigned unchallenged for almost 1500 years - most of this text was destroyed during the Dark Ages.

Anatomy really flourished around the 17th and 18th centuries largely due to the invention of the printing press that facilitated the exchange of ideas. Because anatomy was based on observations and drawings, the best anatomists where usually excellent artists (*au fait* with Latin) who attended dissections and published their drawings for money – these included, Michelangelo, Rembrandt and Da Vinci.
Today, anatomy is the bedrock of medicine and of an array of allied health disciplines. Anatomical research today is diverse and focuses on understanding anatomical function from that of a single

cell to through to the inter-relation of systems and function, biomechanics and movement, and embryology and development. This is done via techniques in cell and molecular biology, dissection as well as the use of clinical and radiological techniques.

The privilege of studying from cadaveric specimens is the cornerstone of this course and will provide you with an appreciation of the anatomy of the musculoskeletal system and its adaption to function.

Course Aims

This course covers the musculoskeletal anatomy of the **Limbs and Back** focusing on its function and role in movement. It includes a study of the functional aspects of muscles and joints, and consideration of the mechanical properties of tissues. Laboratory classes involve study of prosected specimens, radiography images and surface anatomy.

The course aims to:

- provide students with a knowledge of the musculoskeletal anatomy of the upper limb and lower limb, and the back.
- develop students' understanding of the functional principles underlying joint movements and muscle actions of the upper limb and lower limb, and the back.
- develop students' understanding of the ways in which the structure and function of muscle and joints relates to human movement and biomechanics.

UNSW has developed lists of attributes that graduates - in particular those in science - should possess upon graduation – these are referred to as the '**Graduate Attributes'**. See medicalsciences.med.unsw.edu.au/students/undergraduate/advice-students#graduate

In addition to these, the Department of Exercise Physiology has identified the following **graduate attributes for Health and Exercise Science** students:

- develop a thorough understanding of the relationship between physical activity and health
- develop a broad range of communication skills and an ability to work as a member and a leader of a team
- develop advanced problem solving skills and a capacity for critical thinking
- attain competencies in conducting a broad range of exercise-based clinical tests
- attain skills and detailed clinical knowledge relevant to cardiac, musculoskeletal, or neuromuscular rehabilitation

How the course relates to the Exercise Physiology profession

This course provides students with an understanding of the application of functional anatomy and biomechanics to human movement. In their careers as exercise physiologists, graduating students will require a detailed knowledge of the joint movements and muscle actions involved in exercise activities, activities of daily living and workplace tasks. This course delivers the necessary theoretical background in functional anatomy, highlighting its close link with biomechanics, thus enhancing understanding of movement processes and injury risk.

How the course relates to the Exercise Physiology program

ANAT2451 Functional Anatomy for Health and Exercise Science is a course offered to those students enrolled in the Exercise Physiology Program. It is undertaken in Semester 1 of Stage

2. The course builds on the Stage 1 course Introductory Exercise Science (HESC1501) and Introductory Anatomy (ANAT1551), and complements the Stage 2 course in biomechanics (BIOM2451). Your knowledge in functional anatomy will be directly applied in subsequent courses in the program; specifically, movement assessment and instruction (HESC2452) and the Stage 3 courses course of muscle and motor control (HESC3101), movement rehabilitation (HESC3532) and neuromuscular rehabilitation (HESC3592).

Student learning outcomes

The course focuses on the organisation and structure of the musculoskeletal system that underpins function especially in movement. Student engagement particularly through the anatomy practicals will equip them to be able to identify the anatomical features of each of the joints and their related muscles studied on dissected human specimens, bones and models, as well as apply these to discussions of functional and applied aspects of the musculoskeletal system.

At the end of the course, the student should:

1. better understand the functional anatomy of the upper limb and lower limb
2. know the anatomical features the skeletal elements of the upper limb and lower limb
3. know the structural features of each of the joints of the upper limb and lower limb
4. know the factors that contribute to stability and/or dislocations, and limit movement of each of the joints of the upper limb and lower limb
5. know the anatomical features and actions of the muscles that function to move the upper limb and lower limb
6. know the organization of the major limb nerve plexuses
7. know the peripheral nerves that innervate the muscles of the upper limb and lower limb.
8. know the major vessels (arteries, veins and lymphatic channels) that supply/drain the limbs.
9. apply anatomical knowledge in evaluating movement of the limbs, and in understanding the effect of peripheral nerve lesions
10. apply anatomical knowledge to the understanding of muscle testing
11. appreciate the link between functional anatomy and biomechanics
12. know the surface anatomy related to the structures of the upper limb and lower limb
13. demonstrate practical laboratory skills in anatomy and an understanding of the ethics of working with human remains

Course Structure and Attendance

It is strongly recommended that students attend all lectures as they provide the basis for the practical and subsequent classes. In order to satisfy the requirements of the course you are expected to attend **at least 80% of practical and tutorial classes** and failure to do so (without good reason) may result in a fail.

Lectures/Workshops	Tutorials	Lab
Wednesday	**Monday**	**Friday**
11am-1pm CBL6	**11am-12pm** ***OR*** **12-1pm** Matthews 103	**10-12pm** ***OR*** **12-2pm** WW101(Anatomy Lab)

Teaching rationale and strategies

Student interaction and engagement with the content of the course underpins all learning activities. Students are initially introduced anatomical region in the form of lectures incorporating

multimedia-learning tools. With this knowledge in hand, students engage in learning activities during the laboratory sessions where the teacher/tutor guides the student and encourages each student to actively participate in their learning.

Students are always encouraged to question, observe and share knowledge and experiences that help their learning and that of their peers. The anatomy laboratory is a wonderful and fascinating environment for discovery and students are given every opportunity to explore cadaveric specimens, participate in active discussions and find answers for themselves.

Lectures – This approach is used to present relatively large amounts of information within a given time on specific topics throughout the course. Lecture notes will be available online (see below in Online resources section) prior to or after each lecture, so you should be able to think about and develop an understanding of the lecture concepts as they are presented, rather than writing voluminous notes. However, there will be information and explanations presented in lectures in addition to those covered in the notes that you should take down if they help you to understand the material.

The lecturer will also try to allow some time for interaction and activities in each lecture to provide you with an opportunity to clarify or reinforce the ideas that have been presented. You should take these opportunities to think about the information that has been presented and ask questions to enhance your understanding.

Laboratory practical sessions – The purpose of the practical sessions is to give students first-hand experience of the content covered. The anatomy laboratory is the best resource for learning anatomy and is a wonderful place of privilege, discovery and discussion. The laboratory sessions are small group sessions that allow students to explore prosected specimens of the musculoskeletal system. 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 groups of 3-4.

Tutorials – These sessions are designed for you to apply the concepts that you have learnt in the course and to develop team skills. In these sessions, you will work in small teams of 5-7 students each. You will be divided into teams within the first few weeks of the course and will stay with your team for the duration of the course. During the tutorial time, you will complete team activities that will contribute to your final assessment in this course. Your contribution to the teamwork member will be evaluated by their team mates and will contribute to your grade in this course. You will also be asked to complete evaluation of each of your team members.

Virtual Anatomy Adaptive Tutorials (VAnAT) – The VAnAT will be made available to students periodically via a link in Moodle during this course. These are virtual tutorials based on high quality images of prosected specimens. The tutorials are 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 do these tutorials consistently. The focus of these tutorials will be to apply the principles of functional anatomy of the limbs.

Independent study – There is insufficient time in the lectures, tutorials 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.

Recommended Texts and other Resources

See also Learning Resources.

*In addition to the **course manual**, you will need a textbook **AND** an atlas of human anatomy for this course.*

Recommended text

1. Moore K.L., & Agur A. M. R., Dalley A.F. (2013) **Clinically Oriented Anatomy**. 7th ed. Lippincott Williams & Wilkins: Baltimore

OR

Drake, R.L., Vogl, W., Mitchell, A.W.M.& Gray, H. (2015). **Gray's anatomy for students**. 3rd ed. Philadelphia. London: Elsevier/Churchill Livingstone.
(Available online through the library or via the course Moodle site)

Recommended Atlas

2. Tank P.W. and Gest T.R. (2009) **Atlas of Anatomy**. Lippincott, Wilkins and Williams *(note: This comes as a bundle with Clinically Oriented Anatomy from the UNSW bookshop)*

OR

Abrahams, PH, Spratt, JD, Loukas M, and van Schoor A-N (2013) McMinns & Abrahams' **Clinical Atlas of Human Anatomy**. Elsevier Health

Other useful textbooks are:

3. Hamill, J. & Knutzen, K.M. (2009). **Biomechanical Basis of Human Movement,** 3rd Edition, Lippincott, Williams & Wilkins. ISBN: 0781734053 *(Library call no. 612.76/177)*
4. Rohen J.W., Yokochi, C, Lutjen-Drecoll, E (2006). **Colour Atlas of Anatomy: A photographic study of the Human Body**. 6th ed. Lippincott Williams & Wilkins: Philadelphia

Online resources

5. Virtual Anatomy Adaptive tutorials – accessed via the course Moodle site
6. Anatomy videos – accessed via the course Moodle site
7. Acland's anatomy videos – accessed via the UNSW Library
8. Arnold's Glossary of Anatomical Terms

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

Revision Facilities

1. Anatomy Museum is located on the ground floor of the Wallace Wurth East. The museum contains a variety of bottled anatomical dissections. Please do not remove museum jars from shelves. The museum also contains computers loaded with Anatomy software and Internet access. Access to the museum is by swipe card and is restricted to only anatomy students, between 8.30 a.m. and 5.30 p.m. Monday to Friday. NO photography is allowed in the Anatomy Museum.
2. Rooms G06/G07 in Wallace Wurth East contain computers with a variety of anatomical software, and can be used to access the Virtual Adaptive Anatomy Tutorials (VAnATs). Access to this laboratory is by student swipe card only. Students may use them, provided **the rooms are not required for other classes**.

Assessment

a. Continuous assessment Quizzes **10%**

b. Spot tests (mid-semester and end-of-semester) **30%**
c. Theory exam **30 %**
d. Team-Based- Learning (TBL) Assessment **30%**

Continuous assessment

In these assessments, you will need to:

- demonstrate a thorough knowledge of the functional anatomy of the limbs and back
- analyse and evaluate the involvement of muscles in movement.
- demonstrate and understanding of the link between functional anatomy and biomechanics
- demonstrate practical laboratory skills in anatomy and an understanding of the ethics of working with human remains questions.

Continuous assessments are usually in the form of short tests consisting of multiple choice questions (MCQ). They will be conducted at the beginning of the tutorial classes in weeks 4-13.

Spot tests

In addition to the above, spot tests assess your ability to identify and correctly name significant structures in prosected human specimens, models and radiographs.
In a spot test, students will usually have 3 minutes at each of 10 stations (rest spots maybe included, if necessary) to identify 5-6 labelled structures on the specimen (each station is worth 10 marks). Theory questions may be included at some stations as well.
Spot test 1 will cover lectures and practical sessions for the topics covering back and upper limb.
Spot test 2 will cover lectures and practical sessions for the topics covering lower limb.

Theory examination

The purpose of this exam is to test your understanding of the concepts covered in the ENTIRE COURSE and to assess deeper learning (i.e. the ability to inter-relate information and concepts) and critical thinking. This is one 2-hour paper written during the formal Semester 1 examination period. The final examination will consist of multiple choice questions and short answer questions. The exam will be held during the end-of-session exam period. The outcomes for this assessment are as for those above.

Team based learning assessment

During the first few weeks of the course you will be divided into teams consisting of 5-7 students each. Each team will have a mixture of abilities and backgrounds. The use of team-based learning is designed to improve your learning experience through peer-teaching in an interactive discussion facilitated by a tutor. Students will stay in the same teams for the duration of the course and will work together to complete team assessments.
Team assessment will include three components.

Component 1 – team quizzes (5%)

- During each tutorial session, you will be given a team quiz based on lecture and practical class material covered in previous weeks. You will be informed one week in advance what topics each quiz will cover. You will work in your teams to answer all questions in the quiz. During weeks 1-3 you will be given practice quizzes that will not count towards your final grade to allow you to familiarise yourself with the format of the

assessment and to build positive team dynamics. Team quizzes in other weeks will be graded and each team member will receive the same grade (for example, if your team scored 8/10, each team member will receive a grade of 8).

Component 2 – content application assessment (15%)

- During tutorial sessions of week 7 and week 13 each team will be given a content application assessment to be completed in the tutorial. Week 7 application assessment will be based on the back and upper limb content and week 13 application assessment will be based on lower limb content. You may be given handouts and other materials necessary for your team to work on the application assessment.
- The aim of each application assessment is to demonstrate how you can apply your what you have learnt in this course to solve clinical and functional problems related to musculoskeletal anatomy.
- At the beginning of week 6 and 12 at the latest, each team will be given links to the background materials (if any) they will need to prepare for the application assessment.
- In weeks 7 and 13 you will work in your teams to develop an answer to the problem described in the application assessment by consensus. Your team will then be asked to justify their choice and to defend and discuss this answer with other teams. You may be asked to complete and submit a worksheet that records and justifies your answer.
- Each application assessment will be worth 7.5% of your final mark (total mark for content application assessment = 15%). Each team member will receive the same grade (for example, if your team scored 6/7.5, each team member will receive a grade of 6).
- The application assessments will assess students' ability to work as a team and to apply understanding of the ways in which the structure and function of musculoskeletal structures of back and limbs relates to human movement and biomechanics
- To do well in this assignment, you need to:
    - Attend all the relevant lectures or watch them online;
    - Attend all the relevant tutorials and practical classes;
    - Practice applying concepts learnt during lectures and practical classes by completing problem questions in your lab book and adaptive tutorials online;
    - Complete all the relevant reading or preparation tasks (if these are assigned)
    - Establish effective communication strategy with your team mates in class and after class
    - Make meaningful contribution to team discussions

Component 3 – peer evaluation of team members (10%)

You will be required assess your team members' contribution to team work by completing a team evaluation online by the end of weeks 7 and 13. You will be given a rubric in order to complete this. Collated anonymous feedback from your team members will be provided to each of you by your course convenor. Evaluation submitted in week 7 is formative (i.e. it will not contribute to your marks in this course, but will give you opportunity to improve). Evaluation submitted in week 13 will contribute to 10% of your final grade in this course. Out of this 10%, 7% will come from the average of all marks given by your team mates. The remaining 3% will come from the quality of the feedback you provide to others. Marking rubric for assessing quality of your feedback will be provided to you by the course convenor.

Supplementary examinations

It is intended that supplementary exams for the School of Medical Sciences in Semester 1, 2018 will be held on the 14-21 July 2018. If you are eligible for these, you will be notified of the exact date and time as soon as possible after final exam marks have been resolved. Please note, supplementary and deferred examinations may have a significant oral component.

Enrolment and administrative help

Staff in SoMS student administration are available to help with problems with enrolment and scheduling, and should be the first point of contact for administrative problems. They can be contacted by email: SOMSenquiries@unsw.edu.au

Attendance Requirements

For details on the Policy on Class Attendance and Absence see Advice for Students and the Policy on Class Attendance and Absence.

Attendance at practical classes and tutorials is compulsory, and must be recorded in the class roll at the start of each class. Arrival more than 15 minutes after the start of the class will be recorded as non-attendance. It is your responsibility to ensure that the demonstrator or tutor records your attendance and no discussions will be entered into after the completion of the class. Satisfactory completion of the work set for each class is essential. It should be noted that non-attendance for other than documented medical or other serious reasons, or unsatisfactory performance, for more than 1 practical class during the session may result in an additional practical assessment exam or ineligibility to pass the course. Students who miss practical classes due to illness or for other reasons must submit a copy of medical certificates or other documentation to the course coordinator.

Practical Classes

The practical class is an opportunity for students to develop graduate attributes by behaving in an ethical, socially responsible and professional manner within the practical class.

Students must take due care with biological and hazardous material and make sure all equipment is left clean and functional. In the interests of safety, special attention should be paid to any precautionary measures recommended in the notes. If any accidents or incidents occur, they should be reported immediately to the demonstrator in charge of the class who will record the incident and recommend what further action is required.

For more details see Advice for Students-Practical Classes and the Dissecting Room Rules.

Special Consideration

Please see UNSW-Special Consideration and Student Advice-Special Consideration

If you unavoidably miss any assessment, you must lodge an application with UNSW Student Central for special consideration. If your request for consideration is granted, an alternative assessment will be organised which may take the form of a supplementary exam.

Academic Integrity and Plagiarism

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

penalized 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. See student.unsw.edu.au/plagiarism

The UNSW Student Code outlines the standard of conduct expected of students with respect to their academic integrity and plagiarism.

Feedback

This is a challenging course. The course convener will endeavour to make this course interesting, relevant and a rewarding learning experience for you. Problem based questions have been included at the end of each practical in your course manuals – you are encouraged to work through these to provide yourself with feedback on your progress through the course. During the practical sessions, you will also have an opportunity to try some practice spot-test-style questions. Answers for these will be provided as feedback to you on your progress. The continuous assessment MCQ is designed to give you continuous feedback on your progress. Answers to these will be discussed immediately following the assessment, during the tutorial. In addition, the virtual adaptive anatomy tutorials (V-AnATs) will be made available via a link in Moodle. These will provide you with immediate feedback and are to be used as a formative assessment tool.

Course evaluation and development

From the experience of the course authority and students feedback in 2017, the following changes were made to this course:

- Course tutorials and Moodle sites for ANAT2451 and ANAT3141 were separated to make them more relevant to each course;
- The team-based assignment for this course has been revised to maximise focus on application of content studied in this course and to increase contribution from all team members to the completion of the assignment.

Student feedback is welcome and taken seriously. A myExperience survey will be used to formally gather student feedback. The feedback received is used to enhance the course.

There will also be opportunities for representatives from this course to meet with the course convener at regular intervals during the course. This will provide you with an opportunity to discuss (via these reps) how the course is progressing and any issues that have arisen or difficulties in concepts etc. As CATEIs are usually at the end of the course, this student representative panel is an opportunity for issues to be addressed, corrected or amended while the course is still progressing so that it is rewarding and engaging to the current cohort of students.

Ethical behaviour and human remains

A central form of learning in this course is to study prosected (i.e. professionally dissected) human anatomical specimens. These are prepared from the remains of people who have donated their bodies to UNSW so that you and your peers can study the human body. This is an extraordinary generous act of these donors and their families, and is a special and wonderful privilege. Treating these remains with the utmost care and great respect is mandatory and is our responsibility to these donors and their families – it is also a good ethical practice and is mandated by law.

A note of the preparation of anatomical material

In the **gross anatomy** practicals, you will have the privilege of working with dissected human specimens, as well as dried bones, models and radiological images. These dissections are obtained from cadavers, which have been generously bequeathed (donated) to the University, prior to death.

As soon as possible after death, the body is brought to the University where it undergoes a process known as embalming, which involves flushing the blood out of the arterial system and then infusing it with a colourless preserving solution known as formalin.

The specimens are then dissected to show specific anatomical features. Dissected specimens are stored in a preservative solution that does not contain formalin and when needed, is placed on tables for class use. In some cases, dissected specimens are impregnated with a curable polymer in a process known as plastination, which produces dry non-toxic specimens, which have the texture of firm plastic.

NOTE REGARDING IMAGES IN THIS BOOK

Please note (unless otherwise stated) all images used in this book are taken from the prescribed textbook

Moore K.L., Dalley A.F. & Agur A. M. R., (2010) Clinically Oriented Anatomy. Lippincott Williams & Wilkins

Student Risk Assessments

Medicine Teaching Laboratory Student Risk Assessment	UNSW THE UNIVERSITY OF NEW SOUTH WALES	Gross Anatomy Practical Classes for Medical and Science Students DOC:PHSL-SRA-S&H-01rev1.1

Hazards	Risks	Controls
Physical Cold temperature (16°C) Sharp bone/plastic Biological Fungi, bacteria (tetanus), hepatitis B and C Chemical Formaldehyde Methanol 2-phenoxyethanol	Cold Penetrating wound of foot Infection Corrosive/Flammable Irritant/toxic Irritant	• Wear laboratory coat over appropriate warm clothing • Wear fully enclosed shoes with full coverage of the dorsum of the foot • Have appropriate immunisation • Do not eat, drink or smoke in the Gross Anatomy Lab • Do not place anything (e.g. pens, pencils) into your mouth • Use disposable gloves when handling wet specimens and do not cross-contaminate models or bones with wet specimens • Always wash hands with liquid soap and dry thoroughly with disposable paper towel before leaving to lab • Low concentrations of chemicals used • Chemicals used in well ventilated area • Safety Data Sheets for chemicals available in the laboratory

Personal Protective Equipment required

Emergency Procedures

In the event of an alarm sounding, stop the practical class and wait for confirmation to evacuate from the demonstrators. Then wash your hands.
Follow the instructions of the demonstrators regarding exits and assembly points.

Clean up and waste disposal

- Place all specimens in their original trays. Cover wet specimens with the towels provided. Make sure that towels do not hang over the edge of the table, because this allows fluid to drip onto the floor. Fluids on the floor are a major safety hazard and should be reported to staff
- Replace stools under the tables in your cubicle.
- Remove your gloves and dispose in the biowaste bins provided.
- Wash your hands and instruments thoroughly with the soap provided and dry your hands with the paper towel.
- Remove your laboratory coat when you leave the dissecting room.

Ethics Approval

This type of practical has been previously considered and approved by the UNSW Human Research Ethics Advisory Panel (HREC09372).

Declaration

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

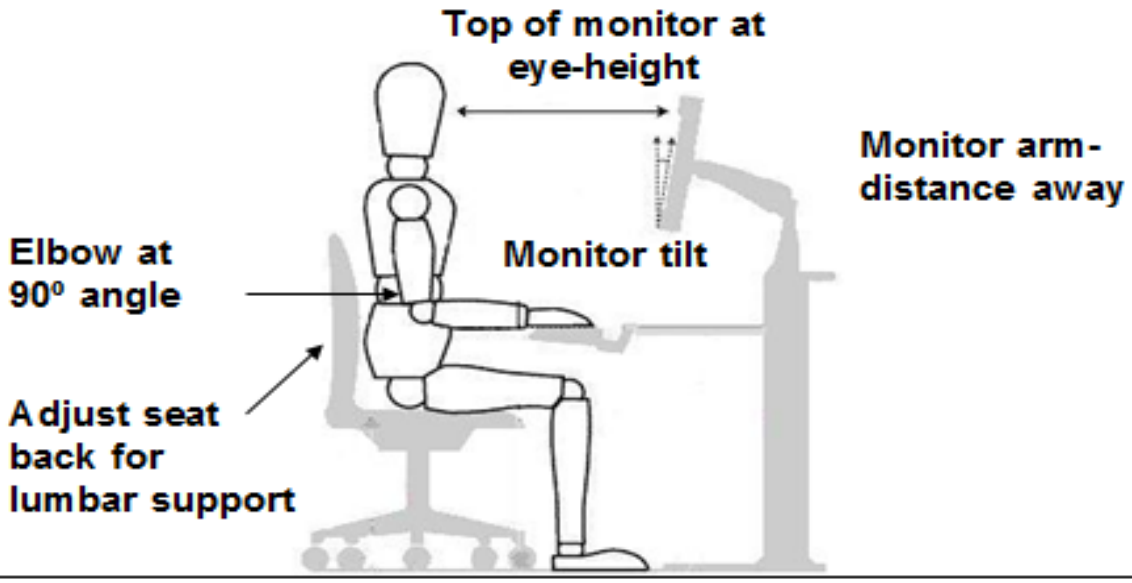
Signature:.....Date:.....
Student number: .....

ANATb SRAb Med&SciStudent relates to RAb MEDb 06. Date for review: 1/06/2018

Science Teaching Laboratory Student Risk Assessment	UNSW THE UNIVERSITY OF NEW SOUTH WALES	ANAT2511 in G6/G7 Wallace Wurth building Practicals from weeks 1 to 13 in Semester 1, 2018.

Hazards	Risks	Controls=6
Ergonomics	Musculoskeletal pain.	Correct workstation set-up.
Electrical	Electrical shock/fire	Check electrical equipment in good condition before use. All portable electrical equipment tested and tagged.

Workstation set-up



Personal Protective Equipment

Not necessary in these practicals.

Emergency Procedures

In the event of an alarm, follow the instructions of the demonstrator. The initial sound is advising you to prepare for evacuation and during this time start packing up your things. The second sound gives instruction to leave. The Wallace Wurth assembly point is the lawn in front of the Chancellery. In the event of an injury, inform the demonstrator. First aiders and contact details are on display by the lifts. There is a first aid kit in the laboratory and the Wallace Wurth security office.

Clean up and waste disposal

No apparatus or chemicals used in these practicals.

Declaration

I have read and understand the safety requirements for these practical classes and I will observe these requirements.

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

Student Number:.....

CLASS SCHEDULE 2018

ANAT 2451 TIMETABLE 2018						
WEEK		LECTURES WEDNESDAYS		LECTURE/TUTORIAL MONDAYS	PRACTICAL FRIDAYS	Virtual Learning Tasks
		11AM-12PM	12-1PM	11AM-12PM OR 12-1PM	10AM-12PM OR 12-2PM	
		CBL6	CBL6	MATTHEWS 103	WW101E	
1	26/02-04/03	Pectoral Girdle: Bones, Joints & Muscles	Shoulder Region: Bones, Joints & Muscles	**TBL tutorial:** Introduction to ANAT 2451	**Lab 1:** Pectoral & Shoulder Regions	**Virtual Anatomy Tutorial:** Shoulder and arm
2	05/03-11/03	Axilla & Arm Regions: Muscles, Spaces	Brachial Plexus, Dermatomes & Myotomes	**Lecture/Workshop:** Axial Skeleton	**Lab 2:** Arm & Elbow Regions	**Online Activity:** Brachial plexus
3	12/03-18/03	Elbow Region: Cubital Fossa & Joints	Forearm: Muscles	**Lecture/Workshop:** Trunk and Back Muscles	**Lab 3:** Axial Skeleton & Back	**Virtual Anatomy Tutorial:** Back: Bones, Joints, Muscles
4	19/03-25/03	Wrist Region: Bones, Joints & Spaces	Hand I	**TBL tutorial:** Shoulder and arm	**Lab 4:** Forearm region	**Virtual Anatomy Tutorial:** Forearm
5	26/03-29/04	Hand II	Upper Limb Vasculature	**TBL tutorial:** Forearm and hand	**EASTER GOOD FRIDAY PUBLIC HOLIDAY 30 March**	**Virtual Anatomy Tutorial:** Hand
MED SESSION BREAK 30 March-8 April 2018						
6	09/04-15/04	Upper Limb Innervation	Upper Limb Nerve Lesions	**TBL tutorial:** UL vasculature and innervation	**Lab 5:** Wrist & Hand Region	**Virtual Anatomy Tutorial:** UL Nerves
7	16/04-22/04	Pelvic Girdle & Glute Region: Bones, Joints & Muscles	Hip & Post. Thigh Regions: Bones, Joints & Muscles	**TBL application assignment 1:** UL and back	**Lab 6:** Upper Limb nerves & vessels	**Peer evaluation 1**
8	23/04-29/04	**ANZAC DAY PUBLIC HOLIDAY 25 April**		**TBL tutorial:** Hip and gluteal region	**SPOT 1**	**Virtual Anatomy Tutorial:** Gluteal region and hip
9	30/04-06/05	Thigh Region (Ant. & Med.): Muscles & femoral triangle	Knee Region: Joints & Popliteal Fossa	**TBL tutorial:** Posterior thigh	**Lab 7:** Gluteal region & hip joint	**Virtual Anatomy Tutorial:** Thigh and Knee
10	07/05-14/05	Leg Region: Compartments & Muscles	Ankle Region: Joints, Spaces	**TBL tutorial:** Thigh and knee	**Lab 8:** Thigh Region	**Virtual Anatomy Tutorial:** Leg and Foot
11	14/05-20/05	The Foot Region	LL Vasculature	**TBL tutorial:** Leg and ankle	**Lab 9:** Leg Region	**Virtual Anatomy Tutorial:** Nerves of Lower Limb
12	21/05-27/05	Lumbosacral Plexus, Dermatomes & Myotomes	LL nerves lesions and locomotion	**TBL tutorial:** Foot, LL vasculature	**Lab 10:** Ankle & Foot Regions	**Revision**
13	28/05-03/06	**REVISION**		**TBL application assignment 2:** LL and locomotion	**Lab 11:** Lower Limb nerves & vessels	**Peer evaluation 2**