UNSW SYDNEY | Australia's Global University

Faculty of Medicine & Health
School of Health Sciences

HESC2452

Movement Assessment and Instruction

COURSE OUTLINE

TERM 2, 2021

CONTENTS PAGE

Please read this manual/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)

HESC2452 Course Information

This course will equip you with knowledge and skills for assessing and instructing clients and patients in exercises and other movements. You will integrate concepts from biomechanics, functional anatomy, motor learning and skill acquisition in the analysis of exercises, work tasks and activities of daily living. You will apply your theoretical understanding of biomechanics and functional anatomy in practical analysis of movement, using both quantitative and qualitative approaches. The course will also cover aspects of exercise instruction and approaches to movement education. You will develop practical skills in teaching new or modified exercises, work tasks or activities of daily living, giving consideration to pedagogical theory in relation to instructing clients and patients regarding movement and exercise.

This course is restricted to students enrolled in the Bachelor of Exercise Physiology (3871).

Credit Points: 6 UoC
Course Pre-requisites:

ANAT2451 Functional Anatomy for Health and Exercise Science (or both ANAT3131 and ANAT3141) and
HESC2451 Biomechanics (or BIOM2451 or SESC2451)

OBJECTIVES OF THE COURSE

This course aims to

1. Develop students' skills in integrating and applying concepts from biomechanics and functional anatomy
2. Extend students' understanding of motor learning and instructional approaches for training people in movement tasks
3. Develop students' skills in quantitative motion analysis techniques
4. Introduce students more generally to educational theory and practice to support their professional development in being able to themselves train student clinicians in their future professional work

COURSE CONVENORS AND TEACHING STAFF

Course Convenor
Dr Rachel Ward — rachel.ward@unsw.edu.au

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Dr Kirsty McDonald — kirsty.mcdonald@unsw.edu.au

Dr Rachel Ward	rachel.ward@unsw.edu.au
Exercise Physiology Education Support Officer: Ms Ina Ismail Available to help with problems with enrolment and scheduling, and the first point of contact for administrative problems.	http://unsw.to/webforms
Technical Officer: Mr Balu Daniel	d.balu@unsw.edu.au

COURSE STRUCTURE AND TEACHING STRATEGIES

Learning activities occur on the following days and times:

- Lectures: All delivered online via Moodle

- Laboratories: Wednesday 2-4pm; or Friday 9-11am; or Friday 11-1pm (Weeks 1-5 & 7-10)

  Students are expected to attend all scheduled lab classes for their full duration (2 hours of labs per week) unless otherwise advised by the teaching staff

- Online Tutorials: Monday 12-2pm (Weeks 1, 2, 4, 5, 7-10)

  These sessions will cover weekly content and provide advice on assessments. These sessions are available for students to attend individually or in their project groups to ask questions, seek advice or support for any course content or for the group motion analysis project.

Students are reminded that UNSW recommends that a 6 unit-of-credit (UoC) course should involve about 150 hours of study and learning activities.

Course philosophy and design

This course includes a series of online lectures conveying the application of quantitative movement analysis of exercise, activities of daily living, and work tasks. The online lectures deliver the theoretical information on which the laboratory and tutorial activities are based. The laboratory and tutorial classes will focus on quantitative movement analysis techniques and qualitative movement assessment skills. These learning activities will progressively build on the biomechanical knowledge and skills you acquired through completion of Biomechanics (HESC2451). With your aim as practitioners (clinicians) being to assist people with movement enhancement, the course also includes a series of online lectures outlining the theories associated with motor learning and skill acquisition. This content will build on the elementary introduction to motor control and learning that was provided in Introduction to Exercise Science

(HESC1501). The online lectures also provide the theoretical basis for the labs in which you will develop and practice your skills in movement instruction. Assessment strategies throughout the course require you to apply your skills in movement assessment and instruction to real-life examples.

Rationale for the inclusion of content and teaching approach

How the course relates to the Exercise Physiology profession

Assessment and instruction of movement tasks related to exercise, workplace tasks, and activities of daily living is a fundamental clinical skill required within the Exercise Physiology profession. Graduating students must therefore be proficient in assessing and instructing exercises and other movements. This course integrates concepts from functional anatomy, biomechanics, motor control and learning, and applies them to the assessment and instruction of movement. Students will develop the necessary skills for quantitative and qualitative assessment of human movement, and for teaching patients and clients appropriate and safe techniques for performance of exercises, work tasks or activities of daily living.

How the course relates to other courses in the Exercise Physiology program

This course applies and extends knowledge and skills acquired from courses in Introductory Exercise Science (HESC1501), Exercise Programs and Behaviour (HESC1511), Functional Anatomy for Health and Exercise Science (ANAT2451), and Biomechanics (HESC2451), to analysing (quantitatively and qualitatively) movements (exercises, work tasks and activities of daily living). Skills and knowledge introduced in this course will be further developed throughout the Exercise Physiology Program, in particular in Advanced Exercise Science (HESC3501), Physical Activity and Health (HESC3504), Movement Rehabilitation (HESC3532), Neuromuscular Rehabilitation (HESC3592) and in Clinical Practicum A & B (HESC4611 & HESC4622).

APPROACH TO LEARNING AND TEACHING

The learning and teaching philosophy underpinning this course is centred on student learning and aims to create an environment which interests and challenges students. The teaching is designed to be engaging and relevant in order to prepare students for future careers.

Online lectures – This approach is used to present relatively large amounts of information to students throughout the course. Online lectures will be available on Moodle throughout the term, and PDF copies of the lecture slides will also be available on Moodle. Students are expected to complete each online lecture before the related tutorial or lab class. The lectures provide the theoretical information that underpins all face-to-face classes and assessment tasks.

Laboratories – The laboratory component of the course serves two purposes. Firstly, to help you to develop technical skills that will be relevant in your professional career. It is essential that you obtain some hands-on experience with the major clinical and/or research techniques in movement assessment and instruction before you begin your clinical practicum. These skills will be rehearsed and developed further during subsequent courses in the program. The

second purpose is to demonstrate and reinforce key theoretical concepts that have been covered in the lectures. The questions contained in the laboratory documents will guide your learning in this respect.

Tutorials – These sessions will be structured to encourage your participation in activities and discussions designed to enhance your learning. You will benefit most if you do some preparation prior to attending the session, this includes viewing the associated online lecture and completing any related quizzes or reading tasks

Independent study – There is insufficient time in the tutorials and laboratories 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.

Assessments – These tasks have been chosen as tools to enhance and guide your learning, and measure your progress, and are therefore a central teaching strategy in this course.

TEXTBOOKS AND OTHER RESOURCES

Moodle

Information about the course as well as lecture, tutorial and laboratory material can be accessed via the UNSW Moodle system from the following site:
https://moodle.telt.unsw.edu.au/login/index.php

You can use Moodle to view all online lectures, download lecture slides, download tutorial and laboratory notes, access your grades, find reference material in the course (such as this document), and communicate with the course convenor and your peers. Please see the course convenor if you would like more information to help you to make the most of this resource.

UNSW Library

The University Library provides a range of services to assist students in understanding how to identify the information required for assignments and projects; how to find the right information to support academic activities; and how to use the right information most effectively. Homepage: https://www.library.unsw.edu.au/

Recommended Reference Books

Edwards, W.H. (2011). *Motor Learning and Control: From Theory to Practice*, Wadsworth Cengage Learning
ISBN: 978-0-495-01080-7
UNSW Library call no. 152.334/37

Griffiths, I.W. (2006). *Principles of Biomechanics and Motion Analysis,* Lippincott, Williams & Wilkins
ISBN: 978-0-7817-5231-2
UNSW Library call no. 612.76/187

Knudson, D.V. (2013). *Qualitative Diagnosis of Human Movement, 3rd Edition,* Human Kinetics
ISBN: 978-0-7360-3462-3
UNSW Library call no. 612.76/148

Suggested Reference Books

Schmidt, R.A. & Lee, T.D. (2008). *Motor Learning and Performance, 5th Edition*, Human Kinetics
ISBN: 978-1-4504-4361-6
UNSW Library call no. 152.334/24

Magill, R.A. (2011) *Motor Learning and Control: Concepts and Applications 10th Edition*, McGraw-Hill
ISBN: 978-0-0780-2267-8
UNSW Library call no. 152.334/22

McGinnis, P.M. (2013) *Biomechanics of Sport and Exercise, 3rd Edition*, Human Kinetics.
ISBN: 978-0-7360-7966-2
UNSW Library call no. 612.76/173A

Hamill, J. & Knutzen, K.M. (2009). *Biomechanical Basis of Human Movement, 3rd Edition*, Lippincott, Williams & Wilkins.
ISBN: 978-0-7817-9128-1
UNSW Library call no. 612.76/177

Suggested Reference Journals

Perceptual and Motor Skills

Motor Control

Journal of Motor Behaviour

Human Movement Science

Journal of Human Movement Studies

Journal of Applied Biomechanics

Sports Biomechanics

Gait and Posture

Journal of Biomechanics

Clinical Biomechanics

UNSW Academic Skills

Academic Skills offers support to all enrolled UNSW students across all years of study. This includes assistance to improve writing skills and approaches to teamwork. See https://student.unsw.edu.au/skills

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

STUDENT LEARNING OUTCOMES

HESC2452 will develop those attributes that the Faculty of Medicine has identified as important for an Exercise Physiology Graduate to attain. These include; skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

Exercise Physiology Program Learning Outcomes

1. Students will be able to demonstrate detailed clinical knowledge and skills relevant to cardiopulmonary, metabolic, cancer, mental health, musculoskeletal and neuromuscular rehabilitation.
2. Students will be able to engage in independent learning and reflective practice for the betterment of professional clinical practice.
3. Students will be able to conduct a broad range of exercise-based clinical tests and deliver lifestyle change programs that use exercise for the primary prevention of disease and the management of chronic disease.
4. Students will be able to apply advanced problem-solving skills and critical thinking within a scientific and clinical context.
5. Students will be able to describe the relationship between physical activity and health and the implications of this relationship throughout the human lifespan.
6. Students will be able to display effective and appropriate communication skills and an ability to work as a member and leader of a team, with respect for diversity and a high standard of ethical practice.

HESC2452 Course Learning Outcomes

1. Describe and demonstrate the appropriateness and effectiveness of a variety of teaching and feedback strategies for movement instruction and exercise delivery.
2. Demonstrate an understanding of the implications of individual differences on motor learning and skill acquisition.
3. Effectively communicate information to clients and patients in training and rehabilitation programs.
4. Demonstrate theoretical understanding and practical skills regarding the collection, graphical presentation and interpretation of quantitative motion analysis data.
5. Identify the biomechanical loads experienced by specific anatomical structures during different postures and movements and recognise when this poses a risk of injury.

ASSESSMENT PROCEDURES

Assessment of your learning in the course will be achieved through laboratory submissions and reports, practical skills assessments, and a final examination. The laboratory submissions and quantitative motion analysis project will assess your ability to accurately collect, process, and analyse quantitative data, and to communicate concisely. The movement instruction practical skills assessment requirements are similar to those encountered when dealing with a client or patient in a face-to-face setting, or when communicating with other health professionals or researchers. These assessments will assess your ability to effectively communicate with and instruct clients or patients in performing specific movements and exercises. These assessments will require you to draw on theories of motor learning and skill acquisition presented in the lectures and tutorials. The final examination will assess your understanding of the principles underlying quantitative and qualitative analysis of human

movement, theories on motor learning and movement instruction, and how these can be related to work-place ergonomics, therapeutic exercise, and activities of daily living.

Summary of Assessments	**Weight**	**Due Date**
3 × LABORATORY SUBMISSIONS & ONLINE QUIZ (5% per lab)	**15%**	Weeks 3, 4, 5
GROUP QUANTITATIVE MOTION ANALYSIS PROJECT *Part A – Proposal (10%)* *Part B – Presentation (15%)*	**25%**	Part A: Week 7 Part B: Week 10
MOVEMENT INSTRUCTION SKILLS ASSESSMENT *Part A – Video & Peer assessment (15%)* *Part B – Live instruction assessment (10%)*	**25%**	Part A: Week 8 Part B: Final exam period
FINAL EXAMINATION	**35%**	Final exam period

3 × LABORATORY SUBMISSIONS (Due Weeks 3, 4, 5) 15%

Laboratory work for Labs 2, 3, 4 will contribute to 15% of the course result, 5% per lab. Assessment items must be submitted by the due date stated on the individual document. Completed laboratory tasks must be submitted for the following three (3) lab sessions:

- *Laboratory 2 – Collecting and Analysing Accelerometry Data (due Week 3)*
- *Laboratory 3 – Instruction and Demonstration in Motor Learning (due Week 4)*
- *Laboratory 4 – Processing and Analysing 2D Kinematic Data (due Week 5)*

Procedures for completion of these items are outlined in the notes for each laboratory session and will also be discussed in the relevant class. The formative feedback received for these tasks will assist with completion of the Quantitative Movement Analysis Project and Movement Instruction Skills Assessment.

Submission guidelines and marking criteria for these assessment tasks will be available on Moodle.

QUANTITATIVE MOTION ANALYSIS PROJECT (Due Week 7 & Week 10) 25%

This is a group assessment task conducted in the form of a multi-stage movement analysis project. Students will use quantitative motion analysis and/or electromyography (EMG) techniques to collect quantitative movement data. They will then process (calculate kinematic data using specialised motion analysis software), analyse and interpret the data to answer a specific research question. The project will be conducted in groups of 5-6 students, with each group working collaboratively to plan and conduct their quantitative motion analysis project. Students will be assessed on two separate components.

Part A) Proposal (10%) – Each group will be required to submit a one (1) page written project proposal including, i) summary of the research question, ii) description of the movement to be analysed, iii) description of data collection methodology; iv) summary of variables that will be processed, analysed and interpreted.

Part B) Presentation (15%) – Students will give a group oral presentation on their research project. This will include background, aims, methods, results and discussion (including limitations). Each group's presentation will be 12-15 minutes in duration. Presentations will be in the form of recorded narrated Power Point presentation. The video file will be submitted via Moodle.

Submission guidelines and marking criteria for this assessment will be available through Moodle.

MOVEMENT INSTRUCTION SKILLS ASSESSMENT (due Week 8 & Final Exam Period) 25%

This practical assessment task will assess students' ability to perform movement instruction and qualitative analysis of commonly used exercises by Exercise Physiologists. This assessment requires completion of two parts:

Part A) Movement Instruction Video & Peer Assessment (15%) due: 5pm Friday Week 8. Students will be required to submit a short video of themselves instructing one (1) exercise to a friend/housemate/partner/family member etc. Students will then assess two (2) peer video submissions, using a marking rubric and calibration tool. Peer assessment will be randomly allocated, and is compulsory in order to obtain a mark for Part A. Feedback provided from Part A should be used in preparation for Part B.

Part B) Live Movement Instruction and Qualitative Analysis (10%). Final Exam Period – Students are required to conduct a movement instruction session with a mock patient. Mock patients will be allocated by the course convenors. Students will be required to instruct two (2) exercises in real-time in a face-to-face setting on campus.

Students will be assessed on their use of physical demonstration, verbal instruction, feedback delivery, and motivational strategies. The primary objective of this assessment task is to provide students the opportunity to perform movement instruction and qualitative analysis, two tasks critical to Exercise Physiology professional practice.

Guidelines and marking criteria for this assessment task will be provided through the "Assessments" section of Moodle.

FINAL EXAMINATION (Final Examination Period) 35%

This assessment task will be held during the Final Examination Period, and will cover ALL material presented in lectures, tutorials, laboratories and assessment tasks from the whole term.

The exam will consist of 50 multiple choice questions (MCQs) worth 50%, and 5 short answer sections, worth 10% each, totalling to 50%.

The specific date, time and location of the Examination will be released by the UNSW Examinations Office.

Final exam period for T2, 2021 is 13-26 August 2020; Supplementary Exam period for T2, 2021 is 6-10 September 2021

Penalties for Late Submission of Assignments

In cases where an extension has NOT been granted, the following penalties will apply: For assignments submitted <24 hours after the due date and time, a penalty of 50% of the maximum marks available for that assignment will be incurred (note: if no time is listed, a 9:00am deadline can be assumed). A further 25% of the maximum possible allocated marks (i.e., a total of 75%) will be deducted from assignments which are two (2) days late. Assignments received more than two (2) days after the due date **will not be allocated a mark,** however, these assignments **must** still be submitted to pass the unit.

COURSE EVALUATION AND DEVELOPMENT

Each year feedback is sought from students about the course and continual improvements are made based on this feedback. myExperience is the way in which student feedback is evaluated and significant changes to the course will be communicated to subsequent cohorts of students.

HESC2452 Movement Assessment and Instruction was offered for the first time in 2012 as part of the Bachelor of Exercise Physiology. It was introduced with the aim of providing students with increased opportunity to integrate and consolidate their knowledge and practical skills in biomechanics and functional anatomy. The heavy weighting given to movement assessment and movement instruction components has been designed to align with the practical clinical skills requirements of the Exercise Physiology profession.

Student feedback is welcome and taken seriously. myExperience will be provided in the final weeks of the course to formally gather student feedback. The feedback received will be used to enhance all aspects of the course in its future delivery.

Student feedback from the Course and Teaching Evaluation and Information (CATEI) survey for the first delivery of HESC2452 in 2012 indicated that more laboratory sessions would have enhanced student learning, as would inclusion of a written examination to assess

understanding of the relevant theories and principles. In response to this student feedback, the number of laboratory sessions was increased for 2013 and 2014, and since 2015 a written examination has been included to occur during the final examination period. In addition, the lecture and tutorial schedule has been revised to provide improved support and alignment with completion of all assessment tasks, and additional assessment through online quizzes was implemented in 2015. In 2016 e-portfolio reflections were added to the course to give students the opportunity to reflect on the development of their professional and clinical skills. From 2018 the number of summative assessment tasks was reduced to four different types of assessments to align with the UNSW 2025 Strategy and Scientia Education Experience. In response to low student attendance at face-to-face lectures in 2018 and previous years, all lectures for 2019 onward have been converted to online delivery via Moodle. 2019 student feedback indicated that students would prefer to have more assessments earlier in the term rather than mostly at the end. In response to this, for 2020 the quantitative motion analysis project has been split into three components with the first part due in Week 4, and the movement instruction assessment now has two components, due in Weeks 8 and during the final exam period.

GENERAL INFORMATION

Official Communication

All communication will be via your official UNSW email, please see Advice for Student-Official Communication for more details.

Attendance Requirements

For details on the Policy on Class Attendance and Absence see Policy on Class Attendance and Absence.

Attendance at all laboratory classes is compulsory. Joining the class more than 15 minutes after the start of the class will be recorded as non-attendance. It is your responsibility to ensure that the 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 during the term 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 apply for Special Consideration.

Laboratory Classes

The laboratory class is an opportunity for students to develop program learning outcomes behaving in an ethical, socially responsible and professional manner within the practical class.

In the interests of safety, special attention should be paid to any precautionary measures recommended in the laboratory document. If any accidents or incidents occur they should be reported immediately to the tutor 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

Special Consideration

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

If you unavoidably miss any assessments, you must lodge an application with UNSW Student Central for special consideration. If your request for consideration is approved an alternative assessment will be organised which may take the form of a supplementary exam or assessment, or increased weighting of the final exam.
See: Student-Advice-Reviews and Appeals

Student Support Services

See: Student Advice-Student support services.

Academic Integrity and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. Plagiarism is a type of intellectual theft and is regarded by the University as academic misconduct. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. The University has adopted an educative approach to plagiarism and has developed a range of resources to support students.

The UNSW Student Code outlines the standard of conduct expected of students with respect to their academic integrity and plagiarism. More details of what constitutes plagiarism can be found here.

Student Conduct

All students must accept their shared responsibility for maintaining a safe, harmonious, and tolerant University environment. For further information see:
www.student.unsw.edu.au/conduct

Student Equity and Diversity Issues

Students requiring assistance are encouraged to discuss their needs with the course convenor prior, or at the commencement of the course, or with staff in the Equitable Learning Services (previously known as SEADU). Further information for students with disabilities see: https://student.unsw.edu.au/els.

Health and Safety

Class activities must comply with the NSW *Work Health and Safety Act 2011*, the *Work Health and Safety Regulation 2017*, and other relevant legislation and industry standards. It is expected that students will conduct themselves in an appropriate and responsible manner in order not to breach HS regulations and ensure a safe work/study environment for themselves and others. Further information on relevant HS policies see: www.safety.unsw.edu.au

Appeal Procedures
Details can be found at Student Complaints and Appeals.

COURSE TIMETABLE 2021

Week	Date	Online Lectures		Tutorial *Monday 12-2pm* **Online via Blackboard Collaborate**	Laboratory *Wednesday 2-4pm* *or Friday 9-11am* *or Friday 11am-1pm* **Wallace Wurth Ex Phys Lab** **OR** **Wallace Wurth G16/17** **OR** **Biomechanics Lab, NeuRA**	Assessments Due
0	*24-28 May*	**L0:** Assumed knowledge revision (optional)				
1	*31 May-4 Jun*	**L1:** Qualitative analysis of human movement	**L2:** Technique and safety assessment of resistance training	**T1:** Week 1 tutorial	**Lab 1:** Movement analysis & biomechanical analysis of technique and posture **WW Ground Floor Ex Phys Lab**	
2	*7-11 Jun*	**L3:** Measuring physical activity: Accelerometry	**L4:** Defining and measuring motor learning and performance	**T2:** Week 2 & 3 tutorial	**Lab 2:** Collecting and analysing accelerometry data **WW G16/17**	
3	*14-18 Jun*	**L5:** Stages of motor learning, including kinematic and EMG descriptors	**L6:** Instruction, demonstration and observation in motor learning	**PUBLIC HOLIDAY** **NO TUTORIAL**	**Lab 3*:*** Instruction and demonstration in motor learning **WW Ground Floor Ex Phys Lab**	**Laboratory 2 Submissions (5%)** due before Lab 3 class
4	*21-25 Jun*	**L7:** Measuring joint movement: Two-dimensional (2D) motion analysis	**L8:** Measuring muscle activity: Electromyography	**T3:** Week 4 tutorial	**Lab 4:** Processing and analysing 2D kinematic data **WW G16/17**	**Laboratory 3 Submissions (5%)** due before Lab 4 class
5	*28 June-2 Jul*	**L9:** Feedback in motor learning - Definitions and functions of feedback	**L10:** Feedback in motor learning - Effects of precision, timing and frequency of feedback	**T4:** Week 5 tutorial	**Lab 5:** Feedback in motor learning **WW Ground Floor Ex Phys Lab**	**Laboratory 4 Submissions (5%)** due before Lab 5 class
6	*5-9 Jul*	**NO CLASSES**				
7	*12-16 Jul*	**L11:** Measuring joint movement: Three-	**L12:** Measuring joint movement: Three-	**T5:** Week 7 tutorial	**Lab 6:** Quantitative Motion Analysis Project Data Collection	**Quantitative Motion Analysis Project**

		dimensional (3D) motion analysis - collecting data	dimensional (3D) motion analysis - analysing data		**WW Ground Floor Ex Phys Lab**	**Proposal & Methodology (10%)** due 9am Wed 14 Jul
8	*19-23 Jul*	**L13:** Skill characteristics/ constraints on motor performance	**L14:** Motivation and attention in motor learning	**T6:** Week 8 tutorial	**Lab 7:** Quantitative Motion Analysis Project Data Processing **WW G16/17**	**Movement Instruction Part A): Video & Peer Assessment (15%)** due 5pm Fri 23 Jul
9	*26-30 Jul*	**L15:** Memory and perception in motor learning	**L16:** Practice and repetition in motor learning	**T7:** Week 9 tutorial	**Lab 8:** Collecting and analysing 3D motion analysis data **Biomechanics Lab, Neuroscience Research Australia (NeuRA)**	
10	*2-6 Aug*	**L17:** Quantitative gait analysis	**L18:** Biomechanical perspectives on injury	**T8:** Week 10 tutorial	**Lab 9:** Movement instruction practice & Online gait analysis tutorial **WW Ground Floor Ex Phys Lab**	**Quantitative Motion Analysis Project Presentation Video (15%)** due 5pm Friday 6 Aug
STUDY PERIOD	*7-12 Aug*	**L19:** Course summary and review (optional)				
FINAL EXAM PERIOD	*13-26 Aug*					**Movement Instruction Part B: Live Assessment (10%)**
						Final Examination (35%)