UNSW AUSTRALIA | Medical Sciences Medicine

Exercise Physiology Program

HESC2452

Movement Assessment and Instruction

Semester 2, 2015
Course Outline

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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)

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Course Details

Credit Points: 6 UOC

Course Prerequisites / Assumed Knowledge: ANAT2451 and BIOM2451

COURSE DESCRIPTION

This course will equip you with skills and knowledge for assessing and instructing exercises and other movements. You will integrate concepts from biomechanics, functional anatomy, and motor learning and skill acquisition in the analysis of exercises, work tasks and activities of daily living. You will refine skills in quantitative and qualitative analysis of movement. 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 the instruction of movement.

AIMS OF THE COURSE

1. To encourage students to integrate and apply concepts from biomechanics and functional anatomy

2. To extend students' understanding of motor learning and instructional approaches for training people in movement tasks

3. To 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

4. To meet industry requirements for professional work in workplace rehabilitation

Student Learning Outcomes

This term is used to describe what it is that you should be able to do, explain or understand if you have learned effectively in the course. For each lecture, tutorial, laboratory and assessment item, the expected learning outcomes will be explicitly stated. The assessment in the course will be matched as closely as possible to the stated learning outcomes. That is, the assessment will test how well you have achieved the learning outcomes of the course. The general learning outcomes for the course are as follows:

At the end of the course you should be able to:
1. Demonstrate technical skills for quantitative and qualitative assessment of human movement
2. Have an ability to communicate information to clients and patients in training and rehabilitation programs
3. Understand the appropriateness and effectiveness of different teaching and feedback strategies for movement instruction
4. Have an appreciation and understanding of the implications of individual differences on motor learning and skill acquisition
5. Identify the loads experienced by specific anatomical structures during different postures and movements, and to recognise when this poses a risk of injury

GRADUATE ATTRIBUTES
- Deliver lifestyle change programs that use exercise for the primary prevention of disease and the management of chronic disease
- Apply clinical skills and knowledge relevant to cardiopulmonary, metabolic, musculoskeletal and neuromuscular rehabilitation
- Communicate effectively with patients, colleagues and other health professionals
- Work as a member and a leader of a team
- Display a respect for diversity and a high standard of ethical practice

Course Evaluation and Development

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 practical course assessments in movement assessment and movement instruction has been designed to align with the practical clinical skills requirements of the Exercise Physiology profession.

Student feedback is welcome and taken seriously. A Course and Teaching Evaluation and Improvement (CATEI) survey 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 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 a written examination has been scheduled to occur during the end of session 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.

Rationale for the Inclusion of Content and Teaching Approach

Course philosophy and design – This course commences with a series of lectures conveying the application of movement assessment to analysis of exercise, activities of daily living, and ergonomic tasks. These lectures run concurrently with laboratory activities focusing on advanced quantitative movement analysis techniques. These learning activities will progressively build on the biomechanical knowledge and skills you acquired through completion of Biomechanics for Health and Exercise Science (BIOM2451). With your aim as practitioners (clinicians) being to assist people with movement enhancement, the course then progresses with a series of 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). These lectures will be supported by concurrent tutorials in

which you will develop and practice your skills in movement instruction. The course also includes lectures delivered by practicing Exercise Physiologists from the UNSW Lifestyle Clinic, in which aspects of therapeutic exercise instruction will be covered. Assessment strategies throughout the course require you to apply your skills in movement assessment and instruction to real-life examples.

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 extends knowledge and skills acquired from courses in Introductory Exercise Science (HESC1501), Exercise Programs & Behaviour (HESC1511), Functional Anatomy (ANAT2451), and Biomechanics for Health and Exercise Science (BIOM2451), to apply these to analysing (quantitatively and qualitatively) movements (exercises, work tasks and activities of daily living) and identifying how different tissues are loaded in these movements. Skills and knowledge introduced in this course will be further developed throughout the program, in particular in Physical Activity and Health (HESC3504), Muscle and Motor Control (NEUR3101), Movement Rehabilitation (HESC3532), Neuromuscular Rehabilitation (HESC3592) and in Clinical Practicum A & B (HESC4611 & HESC4622).

TEACHING STRATEGIES

Lectures – This approach is used to present relatively large amounts of information within a given time on specific topics throughout the course. PDF copies of the lecture notes will be available online (see below in COURSE 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.

Laboratories – The purpose of the practical components of the course are twofold. The first purpose is 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 use experiments to demonstrate and reinforce key theoretical concepts that have been covered in lectures. The questions contained in the practical outlines will guide your learning in this respect.

Tutorials – This format provides a more informal learning environment than a lecture. 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.

Independent study – There is insufficient time in the lectures, 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. Relevant additional resources, including textbook chapters, will be cited in each lecture.

Assessments – These tasks have been chosen as tools to enhance and guide your learning as well as a way of measuring performance, and are therefore a central teaching strategy in this course.

Assessments

Assessment of your learning in the course will be achieved through two clinical skills assessments, laboratory submissions, and a final examination. The clinical 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. These assessments will require you to draw on theories of motor learning and skill acquisition presented in lectures and tutorials. The lab submissions and quantitative motion analysis report will assess your ability to accurately collect, process, and analyse data, and to communicate concisely in a written report. 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
4 × LABORATORY SUBMISSIONS – GRAPHS & ONLINE QUIZ (2.5% PER LAB)	**10%**	Weeks 3, 4, 5, 6
4 × PRE-TUTORIAL QUIZZES – MULTIPLE CHOICE ONLINE QUIZ (1.25% PER QUIZ)	**5%**	Weeks 5, 7, 9, 11
MOVEMENT INSTRUCTION VIDEO, WITH SELF-REFLECTION & PEER-REVIEW	**20%**	Week 9 9am Monday 21 Sept
QUANTITATIVE MOTION ANALYSIS REPORT	**25%**	Week 12 9am Monday 19 October
MOVEMENT INSTRUCTION & EXERCISE ANALYSIS – VIVA	**10%**	Week 13 - During laboratory session times
END OF SESSION EXAMINATION	**30%**	End of session exam period

4 × Laboratory Submissions (Due Weeks 3, 4, 5, 6)

Completed laboratory tasks must be submitted for the following four (4) lab sessions:
- *Laboratory 1 – Actigraphy 1: Collecting and Analysing Accelerometry Data* (due Week 3)
- *Laboratory 2 – Actigraphy 2: Scoring and Analysing Physical Activity Data with ActiLife* (due Week 4)
- *Laboratory 3 – Digitising, Processing and Analysing 2D Kinematic Data with MaxTRAQ* (due Week 5)
- *Laboratory 4 – Processing and Analysing 3D Kinematic Data with Visual3D* (due Week 6)

Each submission is worth 2.5% of the total course mark, summing to a total of 10% of the course result. These tasks have been designed to be completed within the two (2) hour duration of each laboratory session. Procedures for completion of these items are outlined in the notes for each laboratory session. These items must be submitted electronically via Moodle one (1) week after the laboratory session in which you completed the work. The formative feedback received for these tasks will assist with completion of Assessment Task 3 - Quantitative Movement Analysis Report.

Learning Outcomes for the *4 × Laboratory Submissions*
- To develop skills in conducting quantitative movement analysis with accuracy and attention to detail.
- To develop the ability to use customised software packages and hardware to collect data for quantitative assessment of movement
- To develop proficiency in use of Microsoft Excel for data processing and graphing
- To develop the ability to accurately analyse and interpret quantitative movement assessment data

Submission guidelines and marking criteria for these assessment tasks are available through the "Assessments" section of Moodle.

4 × Pre-Tutorial Quizzes (Due Weeks 5, 7, 9, 11)

Before attending Tutorials 2, 3, 4, and 5, you are required to complete a pre-class reading, and then complete an online multiple-choice quiz based on information provided in the reading. Each quiz is worth 1.25% of the total course mark, summing to a total of 5% of the course result. All readings will be available from Week 1 of semester, and each quiz will be available for one week prior to Tutorials 2, 3, 4 and 5, in Weeks 5, 7, 9, 11, respectively. Each quiz MUST be completed <u>before</u> the relevant tutorial in order for marks to be awarded.

Learning Outcomes for the *4 × Pre-Tutorial Quizzes*
- To develop your ability to perform qualitative analysis of movement by identifying appropriate critical features, goals, skills, and abilities associated with a particular movement
- To develop your ability to effectively communicate information to clients and patients in training and rehabilitation programs
- To understanding the appropriateness and effectiveness of different teaching and feedback strategies for movement instruction

Movement Instruction Video, With Self-Reflection & Peer-Review (due Week 9)

Part 1
This task is conducted in groups, however each student will receive an individual assessment mark. Students will work in groups of 3 to conduct a movement instruction session. Each student will be videoed while instructing a therapeutic exercise to one of their group members

For instruction of each therapeutic exercise, one student will act as the movement instructor, one as the patient/client (learner) and the third student will video and observe the movement instruction session. Students will switch roles for each exercise during the session, giving each student the opportunity to perform each role within the group. The instruction of each exercise should be of 3 minutes duration per student. Each student will submit their own individual video file.

Video files will be submitted via upload to YouTube and provision of the YouTube link to the course convenor through the Video Assignment link in Moodle. Students can choose the level of privacy for their video. If you do not want your video to be available for public access then ensure you set your privacy setting to "Private", or "Unlisted". Information on the YouTube privacy settings can be obtained through the following link. https://support.google.com/youtube/answer/157177?hl=en&rd=1. Please read this information very carefully before uploading your video to YouTube.

Part 2
Upon completion of filming the movement instruction session, students will be required to watch the video and complete some self-reflection and peer-review activities. Students will summarise their self-reflection on their own performance as the movement instructor, as well as provide constructive peer-review of their group members' performance as the movement instructor. The self-reflection and peer-review information will be provided in the form of written answers to specific questions for each role. Answers to these questions will be submitted by completing and uploaded an Assignment Submission Template to Moodle.

Learning Outcomes for the *Movement Instruction Video, with Self-Reflection and Peer-Review*
- To develop your ability to effectively communicate information to clients and patients in training and rehabilitation programs
- To understanding the appropriateness and effectiveness of different teaching and feedback strategies for movement instruction

Submission guidelines and marking criteria for this assessment task are available through the "Assessments" section of Moodle.

Quantitative Motion Analysis Report (Due Week 12)

This assessment task will take the form of a written movement analysis report. Students will be required to submit a quantitative analysis of a specific movement task. Three dimensional (3D) kinematic data and electromyography (EMG) data will be collected for this report during the laboratory sessions conducted in Weeks 7 and 8. Data collection will be conducted in groups. Time will be allocated for data processing and graph preparation during the laboratory sessions in Weeks 9 and 10. Data processing and graph preparation

will be conducted individually. Each student must complete their own individual Movement Analysis Report, and submit this electronically through Turnitin via Moodle.

Learning Outcomes for the *Quantitative Motion Analysis Report*
- To develop and apply skills and knowledge in advanced quantitative movement analysis
- To develop your ability to communicate effectively in the format of a written report

Submission guidelines and marking criteria for this assessment task are available through the "Assessments" section of Moodle.

Movement Instruction & Exercise Analysis – Viva (Assessed Week 13)

This assessment task will be held in Week 13 during the usual laboratory timeslots and will be based on assessment of the student's ability to perform movement instruction and qualitative analysis, tasks commonly used in exercise physiology. Each student will be required to perform the tasks listed below, under the face-to-face supervision and assessment of an examiner. Students will be assessed on:

1. Appropriate movement analysis and identification of critical features of selected therapeutic exercises
2. Correct analysis of the skills, abilities, goals and relevance of selected therapeutic exercises
3. Instruction of a mock patient in performance of selected therapeutic exercises. Students will be assessed on their use of physical demonstration, verbal instruction, feedback delivery, and motivational strategies.

Learning Outcomes for the *Movement Instruction and Skills Analysis – Viva Assessment*
- To develop your ability to perform qualitative analysis of movement by identifying appropriate critical features, goals, skills, and abilities associated with a particular movement
- To develop your ability to effectively communicate information to clients and patients in training and rehabilitation programs
- To understanding the appropriateness and effectiveness of different teaching and feedback strategies for movement instruction

Guidelines and marking criteria for this assessment task are available through the "Assessments" section of Moodle.

End Of Session Examination (End Of Session Exam Period)

This assessment task will be held during the final examination period in November, and will cover ALL material presented in lectures, tutorials, and laboratories from the ENTIRE semester.

Learning Outcomes for the *End of Session Examination*
- To demonstrate detailed knowledge of the principles underlying quantitative movement analysis techniques, and interpretation of quantitative movement analysis data.
- To demonstrate a comprehensive understanding of theories of motor learning and skill acquisition and how these can be applied to instruction of movement
- To demonstrate understanding of the processes required for accurate qualitative analysis of human movement

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

Penalties for late submission of assignments – In cases where an extension has NOT been granted, the following penalties will apply: For assignments submitted after **9:00am** on the due date, a penalty of 50% of the maximum marks available for that assignment will be incurred. 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 course.

Attendance Requirements and Assessment Procedures

Attendance is expected at all lectures, tutorials and laboratories for this course.

Attendance at all laboratories and tutorials is compulsory and will be recorded. 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. Students who do not participate in these sessions for any reason other than medical or misadventure, will be marked absent, and will be considered ineligible to pass the course.

If absent for medical reasons, a medical certificate must be lodged with the course convenor within 7 days of the time period of the certificate's expiry. No consideration will be given after this time. Although lectures will be available on Echo360, student participation is encouraged in lectures, and these are important to attend.

DEFERRED EXAMS OR ASSESSMENTS

If you miss an exam or assessment you must lodge an application for Special Consideration (https://student.unsw.edu.au/special-consideration), making sure that you supply adequate documentation (e.g. a medical certificate). You must lodge your request through myUNSW . The application will then be assessed and a deferred exam or assessment may be granted. You cannot assume you will be granted a supplementary exam or assessment.

Resources for Students

See also [Learning Resources](#) on the School of Medical Sciences website.

TEXTBOOKS

Recommended

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

Course Schedule

Week	Date	Lecture 1 Monday 12-1pm *Wallace Wurth LG03*	Lecture 2 Friday 2-3pm *Wallace Wurth LG03*	Tutorial Monday 5-6pm Tuesday 5-6pm Thursday 1-2pm Friday 1-2pm *Wallace Wurth Ex Phys Lab*	Laboratory Thursday 2-4pm Thursday 4-6pm Friday 9-11am Friday 11-1pm *Wallace Wurth G08 OR Wallace Wurth Ex Phys Lab*	Assessments Due
1	27 Jul-1 Aug	**L1:** Course introduction & overview (RW)	**L2:** Observational (qualitative) movement analysis (RW)			
2	3-7 Aug	**L3:** Measuring physical activity: Accelerometry (BB)	**L4:** Measuring joint movement: Two-dimensional (2D) motion analysis (BB)		**Lab 1:** Actigraphy 1: Collecting and Analysing Accelerometry Data (RW/JB/MJ/SR) *Wallace Wurth G08*	
3	10-14 Aug	**L5:** Measuring joint movement: Three-dimensional (3D) motion analysis - collecting data (RW)	**L6:** Measuring joint movement: Three-dimensional (3D) motion analysis - analysing data (RW)	**T1:** Preparation for Movement Instruction Video Assessment (BC/JB) *Wallace Wurth Ex Phys Lab*	**Lab 2:** Actigraphy 2: Scoring and Analysing Physical Activity Data with ActiLife (RW/JB/MJ/SR) *Wallace Wurth G08*	• <u>**Laboratory 1**</u> **Submissions due (2.5%)**
4	17-21 Aug	**L7:** Defining and measuring motor learning and performance (RW)	**L8:** Stages of motor learning, including kinematic and EMG descriptors (RW)		**Lab 3:** Digitising, Processing and Analysing 2D Kinematic Data with MaxTRAQ (RW/JB/MJ/SR) *Wallace Wurth G08*	• <u>**Laboratory 2**</u> **Submissions due (2.5%)**
5	24-28 Aug	**L9:** Instruction, demonstration and observation in motor learning (RW)	**L10:** Feedback in motor learning - Definitions and functions of feedback (RW)	**T2:** Qualitative Analysis of Human Movement (BC/JB) *Wallace Wurth Ex Phys Lab*	**Lab 4:** Processing, Displaying and Analysing 3D Kinematic Data with Visual3D (RW/JB/MJ/SR) *Wallace Wurth G08*	• <u>**Laboratory 3**</u> **Submissions due (2.5%)** • <u>**Tutorial 2**</u> **Online Quiz due (1.25%)**
6	31 Aug-4 Sept	**L11:** Feedback in motor learning - Effects of precision, timing and frequency of feedback (RW)	**L12:** Skill characteristics/ constraints on motor performance (RW)		**Lab 5:** Collecting 3D Kinematic Data with MaxPRO (RW/JB/MJ/SR) *Wallace Wurth Ex Phys Lab*	• <u>**Laboratory 4**</u> **Submissions due (2.5%)**

7	7-11 Sept	**L13:** Motivation and attention in motor learning (RW)	**L14:** Memory and perception in motor learning (RW)	**T3:** Instruction & Feedback in Motor Learning (BC/JB) *Wallace Wurth Ex Phys Lab*	**Lab 6:** Data Collection for Quantitative Motion Analysis Report (RW/JB/MJ/SR) *Wallace Wurth Ex Phys Lab* **OR Lab 7:** Online Gait Analysis Tutorial	• **Tutorial 3 Online Quiz due (1.25%)**
8	14-18 Sept	**L15:** Practice and repetition in motor learning (RW)	**L16:** Measuring muscle activity: Electromyography (BB)		**Lab 6:** Data Collection for Quantitative Motion Analysis Report (RW/JB/MJ/SR) *Wallace Wurth Ex Phys Lab* **OR Lab 7:** Online Gait Analysis Tutorial	
9	21-25 Sept	**L17:** Quantitative motion analysis reports (RW)	**L18:** Introduction to Ergonomics: Including activities of daily living (ADLs) and work tasks (BB)	**T4:** Motivation in Motor Learning (BC/JB) *Wallace Wurth Ex Phys Lab*	**Lab 8:** Processing Kinematic Data for Quantitative Motion Analysis Report (RW/JB/MJ/SR) *Wallace Wurth G08*	• **Movement Instruction Video with <u>Self-Reflection & Peer-Review</u> due 9am Mon Sept 21 (20%)** • **<u>Tutorial 4</u> Online Quiz due (1.25%)**
				Mid-semester break		
10	5-9 Oct	**NO LECTURE PUBLIC HOLIDAY**	**L19:** Ergonomics: Biomechanical perspectives on injury (RW)		**Lab 9:** Processing EMG Data for Quantitative Motion Analysis Report (RW/JB/MJ/SR) *Wallace Wurth G08*	
11	12-16 Oct	**L20:** Ergonomics: Work task assessment and risk analysis (RW)	**L21:** Video assessment feedback, and instruction for final movement instruction assessment (RW)	**T5:** Practice Scheduling in Motor Learning (BC/JB) *Wallace Wurth Ex Phys Lab*	**Lab 10:** Work Task Risk Assessment (RW/JB/MJ/SR) *Wallace Wurth G08*	• **<u>Tutorial 5</u> Online Quiz due (1.25%)**
12	19-23 Oct	**L22:** Technique & safety assessment for therapeutic exercise delivery (SC)	**L23:** Course summary & review (RW)		**Lab 11:** Movement Instruction Practice & Exercise Analysis (RW/JB/MJ/SR) *Wallace Wurth Ex Phys Lab*	• **<u>Quantitative Motion Analysis Report</u> due 9am Mon Oct 19 (25%)**
13	26-30 Oct	NO LECTURE	NO LECTURE		**Movement Instruction & Exercise Analysis - Viva Assessment (10%)** ((RW/SC/JB/MJ/SR/BC) *Wallace Wurth Ex Phys Lab*	

RW: Rachel Ward   BB: Ben Barry   SC: Sally Casson   JB: Jessica Bellamy   BC: Briana Clifford   MJ: Matthew Jones   SR: Stacey Rigney