

Profile information current as at 29/04/2024 08:18 am

All details in this unit profile for ESSC12004 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

This unit introduces you to basic concepts of mechanics (kinematics, kinetics, and fluid mechanics) as they relate to human movement, sports performance, and injury. In this unit, you will learn qualitative and quantitative approaches to solving biomechanical problems and analysing human movement to optimise movement patterns and performance. The theoretical content is supported with practical activities, which introduce you to basic biomechanical equipment and measurement techniques.

Details

Career Level: Undergraduate

Unit Level: Level 2 Credit Points: 6

Student Contribution Band: 10

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisites: ESSC11001 Physical Activity, Fitness and Health; ESSC11003 Skill Acquisition and Movement Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 1 - 2024

- Cairns
- Mackay City
- Mixed Mode
- Rockhampton

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are: Click here to see your <u>Residential School Timetable</u>.

Website

This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. Online Quiz(zes)

Weighting: 20%
2. Presentation
Weighting: 50%
3. Examination
Weighting: 30%
4. On-campus Activity

Weighting: Pass/Fail

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the <u>University's Grades and Results Policy</u> for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from SUTE feedback

Feedback

Student comment that the Formula Sheet provided for the unit is overwhelming.

Recommendation

It is recommended that the unit includes clear guidance about which formulas apply to each week's content to enable students to develop the confidence to use this critical tool and feel less overwhelmed by it.

Feedback from SUTE feedback and informal student feedback

Feedback

Students enjoyed the practical movement analysis, which is part of the residential school activities and forms the basis of the presentation assessment. However, they also found it confusing as there were a number of different skills available for analysis.

Recommendation

It is recommended to limit the number of activities available for the movement analysis and to consider modifications to residential school to allocate specific times to each activity rather than combining them into a single session.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

- 1. Describe biomechanical concepts related to kinematics, kinetics, and fluid mechanics
- 2. Apply biomechanical principles to various forms of human movement with a focus on exercise, sports performance, and injury
- 3. Apply quantitative approaches to analyse biomechanical problems
- 4. Conduct a biomechanical movement analysis and communicate findings
- 5. Demonstrate professional practice and ethical behaviour expected in exercise and sport science settings.

N/A Level Introductory Level Graduate Level Advanced Level Advanced						
Alignment of Assessment Tasks to Learning Outcomes						
Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	
1 - Online Quiz(zes) - 20%	•		•			
2 - Presentation - 50%		•		•		
3 - Examination - 30%	•	•	•			
4 - On-campus Activity - 0%				•	•	
Alignment of Graduate Attributes to Learning Outcomes Graduate Attributes Learning Outcomes						
	1	2	3	4	5	
1 - Communication	•	•	•	•	•	
2 - Problem Solving	•	•	•	•	•	
3 - Critical Thinking	•	•	•	•	•	
4 - Information Literacy	•	•	•	•		
5 - Team Work				•	•	
6 - Information Technology Competence		•		•	•	
7 - Cross Cultural Competence				•	•	
8 - Ethical practice				•	•	
9 - Social Innovation						
10 - Aboriginal and Torres Strait Islander Cultures						

Alignment of Learning Outcomes, Assessment and Graduate Attributes

Textbooks and Resources

Textbooks

ESSC12004

Prescribed

Biomechanics of Sport and Exercise

Edition: 4th (2020) Authors: Peter McGinnis Human Kinetics Champaign , IL , USA ISBN: 978-1-4925-7140-7 Binding: Hardcover

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Microphone and camera for use with Zoom
- 2D motion analysis software such as Kinovea see Moodle for other software options
- Adobe Acrobat Reader (or similar) software for viewing PDF documents
- Zoom video conferencing software (can be installed via Moodle) or other video recording software
- Microsft Office (Word, Excel, PowerPoint) or similar software such as Open Office

Referencing Style

All submissions for this unit must use the referencing style: <u>American Psychological Association 7th Edition (APA 7th</u> edition)

For further information, see the Assessment Tasks.

Teaching Contacts

Michael Carron Unit Coordinator

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Joshua Guy Unit Coordinator

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Schedule

Week	1	- 04	Mar	2024
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Module/Topic Chapter Events and Submissions/Topic

Introduction. Why Study

Biomechanics?

What is Biomechanics?
Forces

Chapter 1. Forces: Maintaining Equilibrium or Changing Motion

Week 2 - 11 Mar 2024

Module/Topic Chapter Events and Submissions/Topic

Linear Kinematics Chapter 2. Linear Kinematics:

Describing Objects in Linear Motion

Week 3 - 18 Mar 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Linear Kinetics I	Chapter 1. Forces: Maintaining Equilibrium or Changing Motion Chapter 3. Linear Kinetics: Explaining the Cause of Linear Motion	
Week 4 - 25 Mar 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Linear Kinetics II	Chapter 4. Work, Power, and Energy: Explaining the Causes of Motion without Newton	Quiz 1 Opens: Week 4 Friday (29 March 2024) 8:00 am AEST Lab Induction and Health Screening Forms Due: Week 4 Friday (29 March 2024) 5:00 pm AEST
Week 5 - 01 Apr 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Biomechanical Movement Analysis	Chapter 13. Qualitative Biomechanical Analysis to Improve Technique Online Readings	Quiz 1 Closes: Week 5 Friday (5 April 2024) 5:00 pm AEST
Vacation Week - 08 Apr 2024		
Module/Topic	Chapter	Events and Submissions/Topic
		Cairns Residential School (Monday and Tuesday 8 and 9 April 2024) Mackay Residential School (Thursday and Friday 11 and 12 April 2024)
Week 6 - 15 Apr 2024		
Madala/Tay!		
Module/Topic	Chapter	Events and Submissions/Topic
Module/Topic Torques Angular Kinematics	Chapter Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024)
Torques Angular Kinematics	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics:	Rockhampton Residential School (Thursday and Friday 18 and 19 April
Torques	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics:	Rockhampton Residential School (Thursday and Friday 18 and 19 April
Torques Angular Kinematics Week 7 - 22 Apr 2024	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic Fluid Mechanics	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic Fluid Mechanics Week 9 - 06 May 2024	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The Effects of Water and Air	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May 2024) 8:00 am AEST
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic Fluid Mechanics Week 9 - 06 May 2024 Module/Topic	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The Effects of Water and Air Chapter	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May 2024) 8:00 am AEST Events and Submissions/Topic Quiz 2 Closes: Week 9 Friday (10 May
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic Fluid Mechanics Week 9 - 06 May 2024 Module/Topic Applications in Throwing and Kicking	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The Effects of Water and Air Chapter	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May 2024) 8:00 am AEST Events and Submissions/Topic Quiz 2 Closes: Week 9 Friday (10 May
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic Fluid Mechanics Week 9 - 06 May 2024 Module/Topic Applications in Throwing and Kicking Week 10 - 13 May 2024	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The Effects of Water and Air Chapter Online Readings	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May 2024) 8:00 am AEST Events and Submissions/Topic Quiz 2 Closes: Week 9 Friday (10 May 2024) 5:00 pm AEST
Torques Angular Kinematics Week 7 - 22 Apr 2024 Module/Topic Angular Kinetics I Week 8 - 29 Apr 2024 Module/Topic Fluid Mechanics Week 9 - 06 May 2024 Module/Topic Applications in Throwing and Kicking Week 10 - 13 May 2024 Module/Topic Applications in Weightlifting and	Chapter 5.Torque and Moments of Force: Maintaining Equilibrium or Changing Angular Motion Chapter 6. Angular Kinematics: Describing Objects in Angular Motion Chapter Chapter 7. Angular Kinetics: Explaining the Causes of Angular Motion Chapter Chapter 8. Fluid Mechanics: The Effects of Water and Air Chapter Online Readings	Rockhampton Residential School (Thursday and Friday 18 and 19 April 2024) Events and Submissions/Topic Quiz 2 Opens: Week 8 Friday (3 May 2024) 8:00 am AEST Events and Submissions/Topic Quiz 2 Closes: Week 9 Friday (10 May 2024) 5:00 pm AEST

No Lecture		Biomechanical Movement Analysis Presentation Due: Week 11 Wednesday (22 May 2024) 5:00 pm AEST
Week 12 - 27 May 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Review and Final Exam Preparation		
Review/Exam Week - 03 Jun 2024		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 10 Jun 2024		
Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Compulsory On-campus Activity Information

This unit includes compulsory on-campus activities (residential school). You must attend the residential school specific to your mode of enrolment as outlined below. If you prefer to attend an alternate session to that specified for your enrolment mode, please contact the Unit Coordinator to discuss attendance at an alternative residential school. Please see the CQUniversity Handbook and the ESSC12004 Moodle site for up-to-date information. **Please ensure you complete your class registration via MyCQU.**

Cairns (CNS) and mixed-mode (MIX) students living in the area surrounding Cairns

The Cairns residential school is scheduled in Vacation Week (Monday and Tuesday 8 and 9 April 2024) at the Exercise and Sport Science Labs located at Cairns Basketball Association Headquarters (289 Aumuller St.).

Mackay (MKY or MKC) and mixed-mode (MIX) students living in the area surrounding Mackay

The Mackay residential school is scheduled in Vacation Week (Thursday and Friday 11 and 12 April 2024) at the Exercise and Sport Science Labs located on the Mackay City Campus (Building 4).

Rockhampton (ROK) and mixed-mode (MIX) students in all other areas

The Rockhampton residential school is scheduled in Week 6 (Thursday and Friday 18 and 19 May 2024) at the Exercise and Sport Science Labs located on the Rockhampton North Campus (Building 81).

Note for mixed-mode (MIX) students:

Students enrolled via MIX may attend any residential school option; however, it is preferred that you attend the residential school as specified above based on your geographic location. The Cairns and Mackay residential schools are specifically for those enrolled as a CNS or MKY/MKC student or MIX student living in those regions and have strict capacity limits. If the Cairns or Mackay residential schools reach the cap number, and you do not live in the surrounding area, you may be reallocated to the Rockhampton residential school. This is due to limited teaching and space resources in Cairns and Mackay.

Assessment Tasks

1 Online Quizzes

Assessment Type

Online Quiz(zes)

Task Description

The Online Quizzes assessment comprises of two (2) online quizzes. Each online quiz is to be completed on your own using resources to help answer the questions. Some questions will require calculations. As such, please have a calculator and your ESSC12004 Formula Sheet accessible when completing the quiz. For questions with text-based responses (e.g. fill-in-the-blank) you should take care with spelling (Australian English) and grammar, as answers are spelling and grammar sensitive. For calculation-based question, provide numeric responses with two decimal places.

Online quizzes should be completed on a computer as some question styles do not work or display well on mobile devices such as smartphones and tablets. In addition, attempting the quiz on a smartphone can result in your session being interrupted in the event of a phone call or notification.

NOTE: In the absence of an approved extension, no late submissions will be allowed for any online quizzes.

Quiz 1 (10% of final grade)

Quiz 1 will assess content related to lectures, online learning activities, and compulsory readings/videos from Weeks 1 – 4 (inclusive). Quiz 1 will consist of 30 multiple-choice, fill-in-the-blank, labelling, and matching questions. You will have 60 minutes to complete this quiz.

You can only attempt Quiz 1 once, and it must be completed in a single session. You cannot save your answers and return to this guiz at a later time.

The quiz will be available during the following times, please ensure you complete the quiz prior to the Close Date. It is your responsibility to log on to Moodle and complete each online quiz during the time the quiz is available.

Open Date: Week 4 Friday (29 March 2024) 8:00 am AEST **Close Date:** Week 5 Friday (5 April 2024) 5:00 pm AEST

Quiz 2 (10% of final grade)

Quiz 2 will assess content related to lectures, online learning activities, and compulsory readings/videos from Weeks 5 – 8 (inclusive). Quiz 2 will consist of 30 multiple-choice, fill-in-the-blank, labelling, and matching questions. You will have 60 minutes to complete this guiz.

You can only attempt Quiz 2 once, and it must be completed in a single session. You cannot save your answers and return to this guiz at a later time.

The quiz will be available during the following times, please ensure you complete the quiz prior to the Close Date. It is your responsibility to log on to Moodle and complete each online quiz during the time the quiz is available.

Open Date: Week 8 Friday (3 May 2024) 8:00 am AEST **Close Date:** Week 9 Friday (10 May 2024) 5:00 pm AEST

Number of Quizzes

2

Frequency of Quizzes

Other

Assessment Due Date

Due dates for each quiz are as per the Close Dates listed in the Task Description. In the absence of an approved extension, no attempts will be permitted after the specified due dates.

Return Date to Students

You will receive the overall result upon completion; however, you will see feedback regarding the correct answers for each question upon closure of the quiz.

Weighting

20%

Assessment Criteria

Responses to quiz questions will be marked based on the correctness of responses. All questions will be marked numerically and an overall mark will be awarded for each quiz.

Referencing Style

• American Psychological Association 7th Edition (APA 7th edition)

Submission

Online

Submission Instructions

You must log on to Moodle and complete the quiz during the time the quiz is available. A link to each quiz can be found on the Moodle site. Once you have completed the quiz, you must click the 'Submit all and finish' button to submit your responses. When the time limit of the quiz expires, any open attempts will be submitted automatically.

Learning Outcomes Assessed

- Describe biomechanical concepts related to kinematics, kinetics, and fluid mechanics
- Apply quantitative approaches to analyse biomechanical problems

2 Biomechanical Movement Analysis Presentation

Assessment Type

Presentation

Task Description

For this assessment, you will act as a biomechanist to complete a movement analysis of one (1) of the activities listed on

the ESSC12004 Moodle site. Time will be provided during the residential school to record the videos required to complete the analysis. In addition, time will be provided to commence analysing the videos; however, you may need additional time outside of the scheduled laboratory times to complete your analysis.

Once you have completed your analysis, it is to be summarised in an audio-visual presentation that is 10-12 minutes in length. Presentations recordings outside of this duration will be awarded marks as per the marking rubric. Any information presented beyond 14 minutes will not be marked. Your audio-visual presentation should be prepared using PowerPoint (or similar software) and is to include:

- 1. A brief introduction of the activity.
- 2. The identification of at least six (6) observable critical features and a rationale for their selection (based on biomechanical principles).
- 3. A summary of your movement analysis, which evaluates the client's performance in relation to the identified critical features and includes annotated images or video showing measurement of the critical features.
- 4. Description of two (2) drills and/or exercises to improve performance; and a rationale for the suggested drills and/or exercises.
- 5. A minimum of five (5) relevant references that are used throughout the presentation. References are to be peer-reviewed journal articles, textbooks, or coaching manuals.

Your presentation is to be video recorded and uploaded to Moodle as a video file (.mp4, .avi, .mov, or .wmv). The recommended software for recording your presentation video is Zoom; however, you can use other video recording software to record the presentation. Information on using Zoom to record a presentation will be provided on Moodle. The Unit Coordinator must receive acceptable files that are viewable/readable. If an unacceptable/corrupt file is submitted, your assessment will be considered late until an acceptable file is submitted and penalties will be incurred in line with CQUniversity's Assessment Policy and Procedure (Higher Education Coursework).

Please be advised the assessment submission will be checked for plagiarism (and other types of academic misconduct). You are advised to familiarise yourself with CQUniversity's Academic Misconduct Procedures. Any assessments suspected of plagiarism (or other types of academic misconduct) will be dealt with in accordance to CQUniversity's Academic Misconduct Procedures with subsequent penalties applied.

Al statement: The use of generative Al is not allowed for this assessment item. The assessment must be completed individually by each student.

Additional resources related to movement analyses will be provided on Moodle.

Assessment Due Date

Week 11 Wednesday (22 May 2024) 5:00 pm AEST

Assessments submitted after the due date, without an approved extension, will incur late penalties in accordance with CQUniversity's Assessment Policy and Procedure (Higher Education Coursework). Submissions made after 5:00 pm (AEST) Monday 10 June 2024 (without an approved extension) will not be formally marked as maximum late penalties will have occurred and a grade of zero (0) will be automatically applied.

Return Date to Students

Review/Exam Week Wednesday (5 June 2024)

Marks and feedback will be returned within two (2) weeks of the due date.

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Presentations will be marked on the following criteria:

- Identification of the overall performance objective and description of the activity
- Identification of six (6) critical features and the biomechanical rationale for the selection of these features
- Appropriate use of video analysis software to identify and measure the six (6) critical features
- Summary of the client's performance based on the six (6) critical features
- Summary the two (2) drills/exercises with justification for drill/exercise selection
- Appropriate use of referencing throughout the presentation
- Presentation skills (including quality of slide design; use of cues to initiate speech during the presentation; use of voice/eye contact/body language; adherence to time limit; professionalism; presentation structure)

The marking rubric will be available on Moodle.

Referencing Style

• American Psychological Association 7th Edition (APA 7th edition)

Submission

Online

Submission Instructions

Your assessment is to be submitted as video (.mp4, .avi, .mov, or .wmv) file of your presentation. All submissions are to be completed individually. The Unit Coordinator must receive acceptable files that are viewable/readable. If an unacceptable/corrupt file is submitted, your assessment will be considered late until an acceptable file is submitted and penalties will be incurred in line with CQUniversity's Assessment Policy and Procedure (Higher Education Coursework).

Learning Outcomes Assessed

- Apply biomechanical principles to various forms of human movement with a focus on exercise, sports performance, and injury
- Conduct a biomechanical movement analysis and communicate findings

3 On-campus Activity

Assessment Type

On-campus Activity

Task Description

This assessment item is linked to your attendance and participation in the compulsory on-campus activities and completion of the Laboratory Workbook. As such, you are required to attend one (1) of the timetabled on-campus residential school. Different sessions are available depending on your mode of enrolment (i.e. ROK, MIX, MKY/MKC, CNS), please ensure your complete your class registration via MyCQU. Further details regarding these sessions can be found in the Term Specific Information section of this Unit Profile, on the ESSC12004 Moodle site, and via the CQUniversity Handbook.

During the on-campus activity (residential school), you will undertake a series of practical activities that will develop your hands-on skills related to collecting and interpreting biomechanics data. A Laboratory Manual and Workbook will be provided via the ESSC12004 Moodle site prior to the on-campus sessions.

As part of this assessment, you must do the following:

- 1. Review the Laboratory Induction information available on Moodle and complete the online Lab Induction and Health Screening Forms (DUE: Week 4 Friday 29 March 2024 5:00 pm AEST).
- 2. Attendance and active participation during the residential school
- 3. Complete the Laboratory Workbook The Laboratory Workbook contains questions and data tables on each practical activity and should be completed during the on-campus activities (residential school). You must upload your completed Laboratory Workbook to Moodle (DUE: Week 7 Friday 26 April 2024 5:00 pm AEST).

Assessment Due Date

Due dates for the Laboratory Induction and Health Screening, and Laboratory Workbook are specified in the task description above. Attendance, and participation will be assessed throughout the on-campus laboratory activity sessions and no submission is required. No additional sessions will be available beyond the due date, unless acceptable reasons (with supporting documentation) are provided to warrant an adjustment to the assessment. Please see the CQUniversity Assessment Policy and Procedures (Higher Education Coursework) for further information.

Return Date to Students

Marks (Pass/Fail) will be returned within two (2) weeks of the due date.

Weighting

Pass/Fail

Minimum mark or grade

Pass

Assessment Criteria

There are four (4) criteria that must be met to pass this assessment item:

- 1. **Lab Induction and Health Screening** You must review the Laboratory Induction information and complete the Lab Induction and Health Screening Forms.
- 2. **Attendance** You must attend the entire on-campus residential school. Attendance will be monitored through signing laboratory attendance sheets which will be facilitated by the teaching staff. Please note, there may be multiple attendance sheets to sign.
- 3. **Active Participation** Teaching staff instructing each session will monitor your participation during each practical task and ensure you meet the criteria in the Laboratory Participation Checklist. To meet the criteria for 'active participation' you must complete each item in the Laboratory Participation Checklist. A copy of the Laboratory Participation Checklist will be included in the Laboratory Workbook which will be made available on

the ESSC12004 Moodle site.

4. **Completion of the Laboratory Workbook** – Teaching staff with knowledge and expertise in the field will review your Laboratory Workbook for completion of all questions. If your Laboratory Workbook is not completed with sufficient detail, it will be returned to you for corrections and you will be given one opportunity to resubmit. Feedback will be provided to assist you with the resubmission.

Please note:

- If you miss a session without an approved reason, it will result in a 'Fail' on this assessment item.
- If you are unable to attend one of the on-campus laboratory activities, and provide a valid reason with supporting documentation, then an attempt to make alternate arrangements will be made in consultation with the Deputy Dean Learning and Teaching or equivalent manager. The CQUniversity Assessment Policy and Procedure (Higher Education Coursework) outlines acceptable reasons for adjustments to assessment.

Referencing Style

• American Psychological Association 7th Edition (APA 7th edition)

Submission

Offline

Submission Instructions

Links will be provided on Moodle for completion and submission of the Laboratory Induction, Health Screening Form, and Laboratory Workbook. You must submit the required documents via these links by the due dates as specified above.

Learning Outcomes Assessed

- Conduct a biomechanical movement analysis and communicate findings
- Demonstrate professional practice and ethical behaviour expected in exercise and sport science settings.

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

30%

Length

150 minutes

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

Calculator - non-programmable, no text retrieval, silent only

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic Integrity Policy and Procedure**. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the <u>Academic Learning Centre (ALC)</u> can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem