



PODI12010 Advanced Anatomy and Podiatric Biomechanics

Term 2 - 2017

Profile information current as at 13/12/2025 03:55 pm

All details in this unit profile for PODI12010 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 will provide you with comprehensive knowledge in functional anatomy and biomechanics of the lower limb specifically required in the profession of podiatry. A strong focus will be on the integration of anatomical structures and functions and how these both influence, and are influenced by the manner in which the skeletal, muscular, nervous, and circulatory systems work together. You will learn to use biomechanical terminology relating to the lower extremity that describes motion, position and structural abnormality. Theoretical principles, measurement techniques and gait analysis will also be investigated.

Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisites: ALLH11005 Anatomy and Physiology for Health Professionals 1 and ALLH11004 Anatomy and Physiology for Health Professionals 2. PODI12006 Fundamentals of Pre-Clinical Podiatry Practice. Corequisite: PODI12009 Podiatry Clinical Practice 1.

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 2 - 2017

- Rockhampton
- Sydney

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).

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: 30%

2. **Practical and Written Assessment**

Weighting: 20%

3. **On-campus Activity**

Weighting: Pass/Fail

4. **Examination**

Weighting: 50%

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 [University's Grades and Results Policy](#) 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 Have Your Say - Student Feedback

Feedback

The repetition of information reiterated the importance of learning anatomy for the future workplace.

Recommendation

It is recognised that repetition is necessary for learning and can help students to learn better, but it is not sufficient for most learning. However, staff will continue to implement a variety of teaching and learning strategies to help memory including repetition, imagery and patterns in this combined foundational biomechanics and anatomy unit.

Feedback from Staff Reflection

Feedback

Need for anatomy focused podiatry staff to teach in future unit delivery.

Recommendation

Podiatry staff with a specific focus on the discipline of anatomy will be used for future delivery of this unit.

Unit Learning Outcomes

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

1. Describe and explain the functional anatomy of all muscle, tendon and joint units of the lower limb
2. Interpret the mechanical, physiological and anatomical concepts in the context of human physical performance
3. Use the key biomechanical terms and principles relating to the lower extremity, which describe motion, position and/or deformity
4. Perform a range of biomechanical assessments using quantitative measurement techniques, including assessment of their validity
5. Analyse the gait cycle, its determinants and the related phases of human locomotion.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1 - Online Quiz(zes) - 30%	•	•			
2 - Practical and Written Assessment - 20%	•	•	•	•	•
3 - Examination - 50%	•	•	•		•
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 Assessment Tasks to Graduate Attributes

[illegible]

Textbooks and Resources

Textbooks

PODI12010

Prescribed

Clinical biomechanics of the lower extremities

Edition: First (1996)

Authors: Ronald L. Valmassey

Mosby

St Louis , Missouri , USA

ISBN: 978-0801679865

Binding: Hardcover

[CQUni Bookshop](#)

PODI12010

Supplementary

Muscles: Testing and Function with Posture and Pain

Fifth Review Edition (2005)

Authors: Florence Kendall

Lippincott, Williams and Wilkins

USA

ISBN: 978-0781747806

Binding: Hardcover

[CQUni Bookshop](#)

Additional Textbook Information

These textbooks are often cheaper to source through online bookshops such as Elsevier or Amazon. However please be mindful of longer shipping times for overseas purchases.

However, you can also support your University by purchasing at the CQUni Bookshop [here](#).

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 6th Edition \(APA 6th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Merridy Lithgow Unit Coordinator

m.lithgow@cqu.edu.au

Schedule

Week 1 - 10 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic

Hip and gluteal anatomy

Appropriate resources relevant to each week will be posted in Moodle.

Week 2 - 17 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Thigh anatomy		

Week 3 - 24 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Knee anatomy		

Week 4 - 31 Jul 2017

Module/Topic	Chapter	Events and Submissions/Topic
Leg anatomy		

Week 5 - 07 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Ankle and foot anatomy		

Vacation Week - 14 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 21 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Lower limb surface anatomy		

Week 7 - 28 Aug 2017

Module/Topic	Chapter	Events and Submissions/Topic
Biomechanical principles		

Week 8 - 04 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Biomechanics of the ankle and subtalar joints		

Week 9 - 11 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Biomechanics of the subtalar and midtarsal joints		

Week 10 - 18 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Gait cycles		

Week 11 - 25 Sep 2017

Module/Topic	Chapter	Events and Submissions/Topic
Principles and practice of mechanical therapy		

Week 12 - 02 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
Revision		

Review/Exam Week - 09 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 16 Oct 2017

Module/Topic	Chapter	Events and Submissions/Topic
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Term Specific Information

In all practical classes, students are required to wear the nominated uniform. Students must purchase their uniform from the bookshop. This uniform is separate to the mandatory clinical uniform. Please refer to the Podiatry Course Handbook for further detail.

Assessment Tasks

1 Online Quiz(zes)

Assessment Type

Online Quiz(zes)

Task Description

There will be one online quiz in week 7 covering content from weeks 1-5.

The quiz will consist of 30 questions, and will have a time limit of 60 minutes. The quiz will take place in a computer lab and is a closed-book task. Access to books, notes, websites (other than the quiz) and use of other electronic devices are prohibited during the quiz.

Number of Quizzes

1

Frequency of Quizzes**Assessment Due Date**

The online quiz will be conducted during week 7.

Return Date to Students

The quiz will be marked electronically. Results will be accessible in Moodle through your MyCQU page.

Weighting

30%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

Online

Learning Outcomes Assessed

- Describe and explain the functional anatomy of all muscle, tendon and joint units of the lower limb
- Interpret the mechanical, physiological and anatomical concepts in the context of human physical performance

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

2 Practical and Written Assessment

Assessment Type

Practical and Written Assessment

Task Description

This assessment is an objective structured clinical examination (OSCE). There will be a number of OSCE stations each designed to assess your knowledge and practical skills acquired during this course. A mix of station types and

competencies will be tested in this assessment. There will be a combination of written answer stations and observer assessed stations.

Assessment Due Date

The OSCE will be conducted during week 10.

Return Date to Students

Review/Exam Week Friday (13 Oct 2017)

Weighting

20%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

Offline

Learning Outcomes Assessed

- Describe and explain the functional anatomy of all muscle, tendon and joint units of the lower limb
- Interpret the mechanical, physiological and anatomical concepts in the context of human physical performance
- Use the key biomechanical terms and principles relating to the lower extremity, which describe motion, position and/or deformity
- Perform a range of biomechanical assessments using quantitative measurement techniques, including assessment of their validity
- Analyse the gait cycle, its determinants and the related phases of human locomotion.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Ethical practice

3 On-campus Activity

Assessment Type

On-campus Activity

Task Description

The activities covered in this unit cover professional podiatry skills, which are inherent requirements to meet the professional standards and are integral to your achievement of learning outcomes and assessment in this unit. At least 85% attendance at tutorial, practicals and/or workshops is therefore required to satisfactorily PASS this unit. The Unit Coordinator will keep attendance records for all classes. If you are unable to attend a class, you must notify the Unit Coordinator (in writing/by email) as soon as possible, with a medical certificate or statutory declaration supporting any absence. Failure to maintain a satisfactory attendance record may seriously undermine your ability to complete the unit.

Assessment Due Date

Attendance is recorded throughout the term

Return Date to Students

End of term

Weighting

Pass/Fail

Assessment Criteria

No Assessment Criteria

Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

Submission

Offline

Learning Outcomes Assessed

- Describe and explain the functional anatomy of all muscle, tendon and joint units of the lower limb
- Interpret the mechanical, physiological and anatomical concepts in the context of human physical performance
- Use the key biomechanical terms and principles relating to the lower extremity, which describe motion, position and/or deformity
- Perform a range of biomechanical assessments using quantitative measurement techniques, including assessment of their validity
- Analyse the gait cycle, its determinants and the related phases of human locomotion.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Examination**Outline**

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

50%

Length

180 minutes

Exam Conditions

Closed Book.

Materials

No calculators permitted

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

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 [Academic Learning Centre \(ALC\)](#) 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