PODI13008 *Clinical Biomechanics of the Lower Limb*
Term 1 - 2019

Profile information current as at 17/05/2024 03:26 pm

General Information

Overview

In this unit you will be presented with common structural and functional variations of the lower limb as seen in podiatry practice. You will learn the aetiology, clinical diagnosis and management of common orthopaedic lower limb conditions. You will refine and develop your knowledge and skills in clinical gait analysis and biomechanical assessment which will be used to assess and diagnose biomechanical conditions of the lower limb. This will incorporate various motion analysis devices and medical equipment in the assessment and treatment of biomechanical conditions in a podiatric context.

Details

Career Level: *Undergraduate*
Unit Level: *Level 3*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Prerequisites: PODI12010 Advanced Anatomy and Podiatric Biomechanics. To be enrolled in this unit, students must be enrolled in CB86 Bachelor of Podiatry Practice (Honours) course. Co-requisites: PODI13007 Podiatry Clinical Practice 2 and PODI13010 Sports in Podiatry Practice.
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 - 2019

- 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. **Written Assessment**
Weighting: 50%
2. **Professional Practice Placement**
Weighting: Pass/Fail
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 Student Feedback - Have Your Say

Feedback

The best aspects of the unit were the organisation and assessment description. Lecture slides and learning materials were very thorough which reduced study stress and assisted with being able to learn throughout the term.

Recommendation

As this is the last core unit encompassing theory of clinical biomechanics in the Bachelor of Podiatry Practice (Honours) Course, it is vital that students are knowledgeable in this area prior to treating patients of a biomechanical nature. As such, this unit will continue to be well organised and developed with ever-evolving research in this field to keep students abreast of the latest relevant knowledge.

Feedback from Staff Reflection based on Have Your Say Student Feedback

Feedback

Reconsider weighting and type of assessment tasks

Recommendation

While the three assessment tasks in this unit are purposely varied to provide opportunity for different strengths and learning styles, it is acknowledged that the weighting of such assessment tasks could be reconsidered in the future. Clinical placement is a pass/fail grade, leaving the written assessment and examination to be worth 50% each of the overall final mark. It is acknowledged that if a student does not perform as well as anticipated in the written assessment, they may encounter more stress and anxiety in the lead up to the examination. Weighting and the type of assessment tasks will be revised based on this feedback for future delivery of this unit.

Feedback from Student Feedback - Have Your Say

Feedback

My own knowledge of biomechanics needs improvement

Recommendation

It is acknowledged that clinical biomechanics of the lower limb can be a difficult area to understand during the initial stages of learning, and therefore the podiatry course contains a number of units specific to biomechanics in order to strengthen student knowledge. Scaffolding of learning will continue to occur to ensure students achieve the level of knowledge rquired for subsequent clinical placement experience and to ensure work readiness.

Unit Learning Outcomes

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

1. Assess podiatric cases involving clinical biomechanics of the lower limb, and interpret and analyse findings
2. Develop, implement, and evaluate podiatric interventions for patients with common biomechanical pathologies of the lower limb
3. Evaluate peer reviewed biomechanical literature to support decision making in podiatry practice.

Per NPC1304

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level • Introductory Level • Intermediate Level • Graduate Level ◦ Professional Level ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Written Assessment - 50%			•
2 - Professional Practice Placement - 0%	•	•	
3 - On-campus Activity - 0%	•		
4 - Examination - 50%		•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
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

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 50%	•	•	•	•		•				
2 - Professional Practice Placement - 0%	•	•	•	•	•		•	•		
3 - On-campus Activity - 0%	•	•	•	•						
4 - Examination - 50%		•	•	•						

Textbooks and Resources

Textbooks

PODI13008

Prescribed

Whittle's Gait Analysis
5th edition (2012)
Authors: David Levine; Jim Richards; Michael W. Whittle
Churchill Livingstone
United Kingdom
ISBN: 9780702042652
Binding: Hardcover

Additional Textbook Information
Paper copies can be purchased at the CQUni Bookshop here: http://bookshop.cqu.edu.au (search on the Unit code)

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

Laura Hutchison Unit Coordinator
l.hutchison@cqu.edu.au

Schedule

Week 1 - Rearfoot - 11 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will review the anatomy and biomechanics of the rearfoot, and begin learning about specific rearfoot conditions encountered in podiatry practice.	Weekly readings or textbook chapters will be posted in Moodle. Please note that information from readings may be assessed during the examination.	

Week 2 - Midfoot - 18 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will review the anatomy and biomechanics of the midfoot, and begin learning about specific midfoot conditions encountered in podiatry practice.		

Week 3 - Forefoot - 25 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic

This week we will review the anatomy and biomechanics of the forefoot, and begin learning about specific forefoot conditions encountered in podiatry practice.		

Week 4 - Ankle - 01 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will review the anatomy and biomechanics of the ankle, and begin learning about specific ankle conditions encountered in podiatry practice.		

Week 5 - Knee - 08 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will review the anatomy and biomechanics of the knee, and begin learning about relevant knee conditions.		

Vacation Week - 15 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - Hip - 22 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will review the anatomy and biomechanics of the hip, and cover hip related considerations.		Anzac Day Thursday 25th April

Week 7 - Biomechanics of walking, running and jumping - 29 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will cover the biomechanics of 'normal' gait during walking, running and jumping.		**Clinical patterns** Due: Week 7 Friday (3 May 2019) 11:59 pm AEST

Week 8 - Gait analysis - 06 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will cover gait analysis techniques, ranging from clinical gait analysis to laboratory based three dimensional gait analysis.		

Week 9 - ‘Atypical’ gait and gait characteristics in different conditions - 13 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week will build upon material from weeks 7 and 8 where we will look at some ‘atypical’ gait patterns and gait characteristics in different conditions.		

Week 10 - Gait retraining - 20 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will discuss the biomechanics of gait retraining, and clinically related considerations.		

Week 11 - Theories in podiatric biomechanics - 27 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will discuss different theories in podiatric biomechanics, ranging from traditional through to contemporary.		

Week 12 - Review - 03 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
This week we will review the material from throughout the term and any examination related queries will be clarified.		

Review/Exam Week - 10 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 17 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Attendance: As per the university's recommendation that "all on-campus students are expected to attend scheduled classes," you should also be aware that there is clear evidence to show that attendance rates are directly related to academic progress. It is therefore in your best interest and strongly recommended in the Bachelor of Podiatry Practice (Honours) course, that you attend all scheduled learning activities to support your learning.

Uniform: In all practical classes, you are required to wear the nominated practical class uniform. You must purchase your uniform from the bookshop. This uniform is separate to the mandatory clinical uniform. Please refer to the Podiatry Course Handbook for further details.

Additional teaching staff in this unit:
Dr Malia Ho
North Rockhampton campus
Building 34, room 1.18
m.ho@cqu.edu.au
+61 07 4930 9469

Please be advised that the following textbook may be helpful throughout the unit in addition to the prescribed textbook:
Clinical Biomechanics of the Lower Extremities First Edition (1996)
Authors: Ronald L. Valmassy
Mosby
St. Louis, Missouri, United States of America
ISBN: 9780801679865
Please note the purchase of this textbook is not compulsory and a copy is available in the CQUniversity library for your convenience.

Assessment Tasks

1 Clinical patterns

Assessment Type
Written Assessment

Task Description
You will be required to complete two separate clinical patterns regarding a biomechanical condition commonly encountered in podiatry practice. The aim of the assessment is to succinctly present the best available evidence regarding your topics. Each student will be allocated two different topic areas for their clinical patterns at the beginning of term. Please note your clinical patterns may be de-identified and made available to all members of the unit as a learning resource.

The following areas should be addressed and used as sub-headings in your assignment:

- Definition of the condition

- Aetiology
- Epidemiological characteristics
- Clinical manifestations
- Differential diagnoses - you must justify why each differential diagnosis listed is considered a differential diagnosis and include distinguishing features between the differential diagnoses and topic condition
- Diagnosis - include clinical and specialist investigations if applicable
- Management - including other health professionals that may be involved in management of the condition. In the management section of your assignment please also include the level of evidence associated with each management strategy according to the National Health and Medical Council (NHMRC) evidence hierarchy. For more information please refer to page 6 of: https://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/stage_2_consultation_levels_and_grades.pdf
- Prognosis

The use of tables, images and figures in this assignment is permitted provided it adds to the report.

Formatting requirements:

- Size 12 Arial font
- 1.5 cm line spacing
- 2 cm margins
- A cover page which includes the assessment title, your name and student number, name of Unit Coordinator, unit code and title, due date, and word count

Referencing requirements: The American Psychological Association (APA) referencing style must be used for this assessment. Please refer to the Abridged Guide to the APA Referencing Style on Moodle for further information.
No late submissions are permitted for this assessment unless an extension has been granted by the Unit Coordinator. Please refer to the CQUniversity Assessment Policy and Procedure for more information regarding extensions. If you are late submitting your assessment, penalties will be applied according to the CQUniveristy Assessment Policy and Procedure.

Assessment Due Date
Week 7 Friday (3 May 2019) 11:59 pm AEST

Return Date to Students
Week 9 Friday (17 May 2019)

Weighting
50%

Assessment Criteria
To successfully complete this assessment task, you will need to demonstrate that you are able to:

- Evaluate peer reviewed biomechanical literature to support decision making in podiatry practice.

The assessment rubric for the written assessment will be provided to you at the beginning of term. The assessment criteria will include the following components:

- Content - each area accurately covered
- Correct identification of NHMRC level of evidence for each management option
- Referencing
- Academic writing

Word count limit: 1500 words per clinical pattern. Any additional content exceeding 10% of the word count limit (1650 words) will not be assessed by the marker (excludes tables, appendices and references where applicable). In-text citations are counted as part of the word count.

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
Online

Learning Outcomes Assessed

- Evaluate peer reviewed biomechanical literature to support decision making in podiatry practice.

Graduate Attributes

- Communication

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

2 Internal Clinical Biomechanics Placement

Assessment Type
Professional Practice Placement

Task Description
This unit has a mandatory 16 hours of internal clinical placement which you will complete at the relevant CQUniversity Health Clinic. Placements have been provisionally scheduled to run after exam week on Monday 24/6/19 and Friday 28/6/19 between the hours of 8.00 am and 5.00 pm. Please note that these clinical placement dates may be subject to change. Notice will be provided by the Unit Coordinator in this circumstance. This is a separate clinical placement requirement specific to this unit only and does not replace or substitute the clinical hours required as part of PODI13007 Podiatry Clinical Practice 2.
During this clinical placement, you will put the theory learnt during this unit into practice and conduct student led clinical consultations in a biomechanically focused clinic.

Assessment Due Date

You must submit your completed PODI13008 Clinical Placement Log Book via Moodle no later than five business days after your placement (5/7/2019). Failure to submit the completed Log Book on Moodle by the due date may result in a 'Fail' grade.

Return Date to Students

Weighting
Pass/Fail

Minimum mark or grade
A pass grade is required for this assessment task in order to pass this unit.

Assessment Criteria
Clinical placement is compulsory requiring 100% attendance rate. You are required to wear the approved CQUniversity podiatry clinical uniform and to project a professional image at all times. If you are more than ten (10) minutes late for a scheduled placement day without a valid reason you may be marked absent and be required to make up the clinic day. Please refer to the Clinical Placement Handbooks for further information related to placement. The internal clinical placement is assessed as pass/fail and your grade is assessed using the PODI13008 Clinical Placement Log Book (available on Moodle). You must print your own copy of the PODI13008 Clinical Placement Log Book for use during placement, and submit the completed PODI13008 Clinical Placement Log Book via Moodle no later than five (5) business days after your last placement day (5/7/2019). Failure to submit the completed PODI13008 Clinical Placement Log Book on Moodle by the due date may result in a 'Fail' grade.

If you miss clinical placement you should review the Clinical Placement Handbook and the CQUniversity Work-Integrated Learning/Student Placement Policy and Procedure.

Please pay attention to the following information:
• If you are absent from clinical placement you must follow the sick leave procedure provided to you during orientation. You must alert the relevant supervisors regarding your absenteeism prior to the commencement of the allocated clinical learning experience for that day.
• You must provide the Unit Coordinator with either a medical certificate or statutory declaration explaining your absence no later than five (5) business days after each absence.
• All absence days will need to be made up. Make up sessions will be assigned to you in the case of absence(s). Make up sessions are non negotiable.
• You should be aware that the allocation of clinical placement takes precedence over any personal commitments.
• If you do not notify the relevant people regarding you absence(s) and do not attend an allocated placement you may receive a 'Fail' grade.

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
Online

Learning Outcomes Assessed

- Assess podiatric cases involving clinical biomechanics of the lower limb, and interpret and analyse findings
- Develop, implement, and evaluate podiatric interventions for patients with common biomechanical pathologies of the lower limb

Graduate Attributes

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

3 Competency tasks

Assessment Type
On-campus Activity

Task Description
You will be expected to complete a range of compulsory competency tasks during the term. Each competency task will be completed during tutorial and/or practical sessions and your attendance on campus is compulsory. More details and information regarding the competency tasks will be made available at the start of term.

Assessment Due Date

Each competency task will be completed during tutorial and/or practical sessions and signed off by the Unit Coordinator or member of academic staff. The completion of each competency task on campus is compulsory.

Return Date to Students

Weighting
Pass/Fail

Minimum mark or grade
A pass grade is required for this assessment task in order to pass this unit.

Assessment Criteria
The competency tasks in this unit closely relate to professional podiatry skills, which are inherent requirements to meet the professional standards. Satisfactory completion of these activities on campus is integral to your achievement of learning outcomes and assessments in this unit, and other units within the course. Participation in all competency tasks is required for you to satisfactorily pass this unit.

If you are unable to attend campus during scheduled classes, you must notify the Unit Coordinator (in writing/by e mail) as soon as possible, and provide a medical certificate or statutory declaration supporting any absence within five (5) business days. If the required documentation is not provided to the Unit Coordinator within the stipulated time frame, you will be marked as 'Absent' for the session. Failure to maintain a satisfactory competency record for on campus activities may seriously undermine your ability to complete this unit and will result in a 'Fail' grade.

Referencing Style

- American Psychological Association 6th Edition (APA 6th edition)

Submission
No submission method provided.

Submission Instructions
No submission is required for this assessment task.

Learning Outcomes Assessed

- Assess podiatric cases involving clinical biomechanics of the lower limb, and interpret and analyse findings

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

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
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