# CHIR211

## Chiropractic 1

S1 Day 2014

*Chiropractic*

## Contents

# General Information

Unit convenor and teaching staff
Unit Convenor
Ben Brown
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Other Staff
Roger Engel
roger.engel@mq.edu.au
Contact via roger.engel@mq.edu.au

Credit points
6

Prerequisites
Admission to GDipChiroSc or GCertChiroSc

Corequisites

Co-badged status

Unit description
This unit introduces the student to the history and science of chiropractic. It includes basic psychomotor skills such as peripheral and spinal motion palpation, muscle assessment, soft tissue techniques as well as upper and lower limb joint mobilisation and manipulation techniques. The unit covers a 'core' group of techniques and aims at proficiency of this core. It also includes an understanding of the basic laws of physics as they apply to the biomechanics of joint movement as well as an introduction to research methodology.

## Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

# Learning Outcomes

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

The ability to perform peripheral adjustments and/or mobilisations with a basic level of psychomotor skills associated with these procedures i.e. tactile/palpatory skills and hand/body/eye co-ordination of practitioner movements.

The ability to control these procedures with regard to patient position, practitioner

position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.
The ability to perform basic static and motion palpation on all peripheral joints in the body.
An understanding of peripheral and spinal joint mechanics.
A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.
An understanding of the history and development of chiropractic theories

# Assessment Tasks

| Name | Weighting | Due |
|---|---|---|
| 1 | 15% | weeks 5,8,12 |
| 2 | 30% | weeks 5,8,13 |
| 3 | 15% | week 8 |
| 4 | 10% | weeks 7,9,11 |
| 5 | 5% | weeks 4,6,8,10,12 |
| 6 | 25% | University examination period |

## 1

Due: **weeks 5,8,12**
Weighting: **15%**

Anatomy spot tests cover material from the anatomy stream of the unit. Each Spot Test is worth 5%.

On successful completion you will be able to:

- An understanding of peripheral and spinal joint mechanics.
- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis

as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.

## 2

Due: **weeks 5,8,13**
Weighting: **30%**

The Technique spot tests cover the practical elements of the technique material in the unit. Each Spot Test is worth 10%

On successful completion you will be able to:

- The ability to perform peripheral adjustments and/or mobilisations with a basic level of psychomotor skills associated with these procedures i.e. tactile/palpatory skills and hand/body/eye co-ordination of practitioner movements.
- The ability to control these procedures with regard to patient position, practitioner position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.
- The ability to perform basic static and motion palpation on all peripheral joints in the body.
- An understanding of peripheral and spinal joint mechanics.

## 3

Due: **week 8**
Weighting: **15%**

The written assignment covers a topic that is relevant to the practice of chiropractic in the current health system.

On successful completion you will be able to:

- An understanding of the history and development of chiropractic theories

## 4

Due: **weeks 7,9,11**
Weighting: **10%**

The video assignments are designed as a self-directional learning tool. They involve a student being videoed while performing a peripheral joint mobilisation/manipulation technqiue. Written feedback on the student's performance is combined with the ability of the student to review their performance with the benefit of this feedback. The first two video assignments are worth 3% each while the thrid is worth 4%.

On successful completion you will be able to:

- The ability to perform peripheral adjustments and/or mobilisations with a basic level of psychomotor skills associated with these procedures i.e. tactile/palpatory skills and hand/body/eye co-ordination of practitioner movements.
- The ability to control these procedures with regard to patient position, practitioner position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.
- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.

## 5

Due: **weeks 4,6,8,10,12**
Weighting: **5%**

The online biomechanics quizzes are designed to test the student's understanding of the basic biomechanics principles underlying joint mobilisation/manipulation. Each quiz is worth 1%.

On successful completion you will be able to:

- An understanding of peripheral and spinal joint mechanics.
- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.

## 6

Due: **University examination period**
Weighting: **25%**

The final written examination covers material from all parts of the course including practical and theoretical components.

On successful completion you will be able to:

- An understanding of peripheral and spinal joint mechanics.
- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.
- An understanding of the history and development of chiropractic theories

# Delivery and Resources

- This unit is comprised of lectures and technique tutorials. There will also be some self directed learning within the course.
- The unit is an internal offering.
- Students are expected to attend lectures and tutorials. It is understood that iLearn is a supplement, not a substitute for attendance.
- There are seven (7) classes per week:
    - 3 x 2 hour lectures
    - 4 x 2 hour tutorials
- The timetable for classes can be found on the University web site at:

http://www.timetables.mq.edu.au/

- **TUTORIALS COMMENCE IN WEEK ONE**
- **Tutorial attendance/participation is required and will be factored into the final grade.**

Required and recommended texts are:

- Oatis CA. The mechanics and Pathomechanics of Human Movement. 2nd ed. Lippincott Williams & Wilkins. 2009;

The relative weighting of the two parts is as follows:

**Part A (Theory): 45% of total mark**

i. End of semester written exam **25%**

ii. Written assignment **15%**

iii. Biomechanics online quizzes **5%**

**Part B (Practical): 55% of total mark**

i. Anatomy Spot Test 1, 2 & 3 **15%**

ii. Technique Spot Tests 1, 2 & 3 **30%**

iii. Video Technique assignments 1, 2 & 3 **10%**

**GRADES**

| | | |
|---|---|---|
| HD | High Distinction | Denotes work of outstanding quality |
| D | Distinction | Denotes work of superior quality |
| Cr | Credit | Denotes work of predominantly good quality |
| P | Pass | Denotes work of satisfactory quality |
| F | Fail | Denotes a candidate has failed to complete the unit satisfactorily |

Achievement of grades will be based on the following criteria:

| **Grade** | |
|---|---|
| Pass (P) | A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 50% |
| Credit (Cr) | A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 65% |
| Distinction (D) | A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 75% |
| High Distinction (HD) | A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 85% |

**ASSESSMENT FEEDBACK**

Feedback for each assessment task (except the end of semester written exam) will be provided as soon as is practically possible after the assessment task is performed /submitted. For the Spot Tests, feedback will be given at the next scheduled class for that material or sooner if possible. For the video, feedback will be given within one week of submission of each of the three assessment tasks. For the written assignment due in week 8, feedback will be given by week 12. For the biomechanics online quizzes, feedback will be given at the next scheduled class for that material.

**IMPORTANT NOTES**

· Attendance is expected at lectures and tutorials. 85% attendance is the expected requirement for tutorials. Attendance will be recorded and will be taken into consideration when compiling a student's final grade for the unit.

- **Each student must achieve 50% of the available raw marks in the Practical Component as well as a raw mark of 50% overall (Theoretical + Practical Components) in order to pass this unit**

**This unit is the same as the prvious offering in 2013.**

# Unit Schedule

| CHIR 211<br>Syllabus – 2013 | | | | |
|---|---|---|---|---|
| Week | Day | Topic | Lecturer | Tutorial |
| 1 | Monday | Introduction | Brown/ Rigney | Introductory Tutorial |
| | Tuesday | Anatomy | | Shoulder |
| | Wednesday | Localisation Protocol | Rahme | Structural analysis |
| | Friday | Shoulder theory | Rahme | Shoulder Assessment |

| | | | | |
|---|---|---|---|---|
| 2 | Monday | Biomechanics - shoulder | Burrell | Shoulder Techniques |
| | Tuesday | Anatomy | | Anatomy of the Elbow |
| | Wednesday | Adjustment Protocol | Rahme | Shoulder Techniques II |
| | Friday | Elbow Theory | Rahme | Elbow Assessment |
| 3 | Monday | Biomechanics - elbow | Burrell | Elbow Techniques I |
| | Tuesday | Anatomy | | Anatomy of the Wrist/hand |
| | Wednesday | Soft Tissue Injury and Repair | Rahme | Elbow Techniques II |
| | Friday | Wrist/hand Theory | Rahme | Wrist/hand Assessment |
| 4 | Monday | Biomechanics – wrist/hand | Burrell | Wrist/hand Techniques I |
| | Tuesday | Anatomy | | Hip Anatomy |
| | Wednesday | Clinical Methodology | Rahme | Wrist/hand Techniques II |
| | Friday | Introduction to the Hip | Rahme | Hip Assessment |
| 5 | Monday | Biomechanics - hip | Burrell | Hip Assessment |
| | Tuesday | Anatomy | | Anatomy Spot Test |
| | Wednesday | Research Based Investigation of Chiropractic Mechanism | Burrell | Tehcnique Spot Test |

| | | | | |
|---|---|---|---|---|
| | Friday | Introduction to the Knee | Rahme | Hip Techniques II |
| 6 | Monday | Biomechanics - knee | Burrell | Feedback from the Spot Test |
| | Tuesday | Anatomy | | Anatomy of the Knee |
| | Wednesday | Psychomotor skill acquisition | Downie (8-10am) | KNee Assessment |
| | Friday | Introduction to the Ankle and Foot | Rahme | Hip Tehcniques III |
| **Mid Semester Break April 14th – April 25th, 2014** | | | | |
| 7 | Monday | Biomechanics of the Ankle/Foot | Burrell | Knee Techniques I |
| | Tuesday | Anatomy | | Anatomy of Ankle/Foot |
| | Wednesday | **No lecture** | | Knee Techniques II |
| | Friday | Introduction to Clinical Decision Making | Brown | Ankle/Foot Assessment |
| 8 | Monday | Overview of Spinal Manipulation | Burrell | Ankle/foot Techniques I |
| | Tuesday | Anatomy | | ANATOMY SPOT TEST 2 |
| | Wednesday | No Lecture | | TECHNIQUE SPOT TEST 2 |

| | | | | |
|---|---|---|---|---|
| | Friday | No lecture | | Feedback from Spot Test |
| 9 | Monday | Biomechanics – thoracic spine | Burrell | Thoracic Spine Assessment |
| | Tuesday | Anatomy | | Thoracic spine |
| | Wednesday | Thoracic manipulation theory | Burrell | Thoracic Techniques I |
| | Friday | Thoracic case study | Aguis | Thoracic Tehcniques II |
| 10 | Monday | Biomechanics – lumbar spine | Burrell | Lumbar Spine Assessment |
| | Tuesday | Anatomy | | Lumbar spine |
| | Wednesday | Lumbar manipulation theory | Burrell | Lumbar Spine Tehcniques I |
| | Friday | Lumbar case study | Aguis | Lumbar Spine Tehcniques II |
| 11 | Monday | Biomechanics – cervical spine | Burrell | Cervical Assessment |
| | Tuesday | Anatomy | | Cervical spine |
| | Wednesday | Cervical manipulation theory | Burrell | Cervical Techniques I |
| | Friday | Cervical case study | Aguis | Cervical Techniques II |
| 12 | Monday | Biomechanics summary | Burrell | Revision |
| | Tuesday | Anatomy | | ANATOMY SPOT TEST 3 |

| | | | | |
|---|---|---|---|---|
| | Wednesday | Upper and lower limb revision | Rahme | Revision |
| | Friday | Spinal revision | Aguis | Revision |
| 13 | Monday | No lecture | | No tutorial |
| | Tuesday | No class | | No tutorial |
| | Wednesday | No lecture | | TECHNIQUE SPOT TEST 3 |
| | Friday | No lecture | | No tutorial |

# Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

## Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

## Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

### Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

## Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

## Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

## IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/help/.

When using the University's IT, you must adhere to the Acceptable Use Policy. The policy applies to all who connect to the MQ network including students.

# Graduate Capabilities

## Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

### Learning outcomes

- The ability to perform peripheral adjustments and/or mobilisations with a basic level of psychomotor skills associated with these procedures i.e. tactile/palpatory skills and hand/body/eye co-ordination of practitioner movements.

- The ability to perform basic static and motion palpation on all peripheral joints in the body.
- An understanding of the history and development of chiropractic theories

### Assessment task

- 2

## Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

### Learning outcome

- An understanding of peripheral and spinal joint mechanics.

### Assessment tasks

- 1
- 2
- 4
- 6

## Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

### Learning outcomes

- The ability to perform peripheral adjustments and/or mobilisations with a basic level of psychomotor skills associated with these procedures i.e. tactile/palpatory skills and hand/body/eye co-ordination of practitioner movements.
- The ability to control these procedures with regard to patient position, practitioner position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line

of drive.
- The ability to perform basic static and motion palpation on all peripheral joints in the body.
- An understanding of peripheral and spinal joint mechanics.
- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.
- An understanding of the history and development of chiropractic theories

## Assessment tasks

- 1
- 2
- 3
- 4
- 5
- 6

# Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

## Learning outcomes

- The ability to perform peripheral adjustments and/or mobilisations with a basic level of psychomotor skills associated with these procedures i.e. tactile/palpatory skills and hand/body/eye co-ordination of practitioner movements.
- The ability to control these procedures with regard to patient position, practitioner position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.
- The ability to perform basic static and motion palpation on all peripheral joints in the body.
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- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.
- An understanding of the history and development of chiropractic theories

### Assessment tasks

- 2
- 3
- 4
- 5

## Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

### Learning outcome

- The ability to control these procedures with regard to patient position, practitioner position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.

### Assessment tasks

- 3
- 4

## Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

### Learning outcome

- The ability to control these procedures with regard to patient position, practitioner

position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.

## Assessment task

- 4

# Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

## Learning outcomes

- The ability to control these procedures with regard to patient position, practitioner position, primary contact, secondary contact, lock-up/set-up, speed, amplitude and line of drive.
- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.

## Assessment tasks

- 3
- 4
- 6

# Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

### Learning outcome

- An understanding of the history and development of chiropractic theories

### Assessment task

- 6

## Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

### Learning outcome

- A thorough knowledge of the clinical anatomy of all peripheral joints of the body including: a) A basic knowledge of the biomechanical effects of an adjustment or mobilisation and the indications for their use; b) A basic knowledge of structural analysis as it relates to posture and dysfunction; c) The ability to demonstrate an appropriate level of care in the handling of a patient; d) The ability to demonstrate motion palpation findings for peripheral joints.

### Assessment task

- 4

# Grading

The relative weighting of the two parts is as follows:

**Part A (Theory): 45% of total mark**

i. End of semester written exam (**25%)**

ii. Written assignment **(15%)**

iii. Biomechanics online quizzes **(5%)**

**Part B (Practical): 55% of total mark**

i. Anatomy Spot Test 1, 2 & 3 **(15%)**

ii. Technique Spot Tests 1, 2 & 3 **(30%)**

iii. Video Technique assignments 1, 2 & 3 (**10%)**

## GRADING

| | | |
|---|---|---|
| HD | High Distinction | Denotes work of outstanding quality |
| D | Distinction | Denotes work of superior quality |
| Cr | Credit | Denotes work of predominantly good quality |
| P | Pass | Denotes work of satisfactory quality |
| F | Fail | Denotes a candidate has failed to complete the unit satisfactorily |

Achievement of grades will be based on the following criteria:

| Grade | Description |
|---|---|
| **Pass (P)** | **A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 50%** |
| **Credit (Cr)** | **A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 65%** |
| **Distinction (D)** | **A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 75%** |
| **High Distinction (HD)** | **A minimum mark of 50% in the practical component PLUS a minimum total raw mark of 85%** |

## ASSESSMENT FEEDBACK

Feedback for each assessment task (except the end of semester written exam) will be provided as soon as is practically possible after the assessment task is performed /submitted. For the spot tests, feedback will be given at the next scheduled class for that material or sooner if possible. For the video, feedback will be given within one week of submission of each of the three assessment tasks. For the written assignment due in week 8, feedback will be given by week 12. For the biomechanics online quizzes, feedback will be given at the next scheduled class for that material.

## IMPORTANT NOTES

· Attendance is expected at lectures and tutorials.

· **85% attendance** is the expected requirement for tutorials. Attendance will be recorded and will be taken into consideration when compiling a student's final grade for the unit.

- **Each student must achieve 50% of the available raw marks in the Practical Component as well as a raw mark of 50% overall (Theoretical + Practical Components) in order to pass this unit.**