



# CHIR114

## Chiropractic Sciences 2

S2 Day 2014

*Chiropractic*

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#### **Disclaimer**

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## General Information

Unit convenor and teaching staff

Unit Convenor

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C5C 367

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Credit points 3
Prerequisites Admission to BChiroSc and HLTH108(P) and (CHIR113(P) or CHIR103(P))
Corequisites
Co-badged status
Unit description This unit is a continuation of the philosophy, art and science of chiropractic as introduced in CHIR113. The development of psychomotor skills, the related biomechanics and physics continue. Research methodology is introduced in this unit.

## 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:

Understand energy, heat, and electricity concepts in physics

Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.

Understand basic principles of physical examination of joints and further developed joint palpation skills.

Further develop an understanding of research

Developed an introductory knowledge of joint kinematics.

Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.

Understand and perform mobilisation procedures

## General Assessment Information

### Assignment submission

The submission of the assignment will involve multiple formats. Please carefully read the assignment instructions. The essay component will be submitted on line. The peer review process will also be on line. The power point presentation will be via email to Curtis Rigney: [curtis.rigney@mq.edu.au](mailto:curtis.rigney@mq.edu.au)

### Extensions and penalties

Extensions to assignments is at the discretion of the unit convener. It is the responsibility of the student to prove to the convener that there has been unavoidable disruption. If accepted, marks may be deducted.

### Returning Assessment Tasks and Feedback

1. Spot Tests: Results will be posted on iLearn within a week of completion, and feedback will be given in class.
2. Chiropractic Assignments: Results will be posted on iLearn at the end of the exam period.
3. Physics class test will be returned by end week 8.
4. Practical Examination (OSCE): Results will be posted at the end of the exam period.
5. Written Examination: Papers will not be returned. Marks will be incorporated into the final unit grade.

### Examination(s)

The University Examination period for the Second Half Year 2014 is from Monday 17<sup>th</sup> November to Friday 5<sup>th</sup> of December. You are expected to present yourself for examination at the time and place designated in the University Examination Timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations.

<http://www.timetables.mq.edu.au/exam>

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for Special Consideration. Information about unavoidable disruption and the special consideration process is available at **Policy Central:** <http://www.mq.edu.au/policy/>

If a Supplementary Examination is granted as a result of the Special Consideration process the examination will be scheduled after the conclusion of the official examination period. You are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, that is, the final day of the official examination period.

## Assessment Tasks

Name	Weighting	Due
<a href="#">Spot test</a>	5%	week 7
<a href="#">Principles Assignment</a>	20%	week 7
<a href="#">Physics Class Test</a>	3%	Week 5
<a href="#">Physics Practical</a>	7%	Weeks 2-4

Name	Weighting	Due
<a href="#"><u>Rolling spot</u></a>	5%	Weeks 8-11
<a href="#"><u>Final Practical Exam</u></a>	30%	Week 13
<a href="#"><u>Theory Examination</u></a>	30%	Exam period

## Spot test

Due: **week 7**

Weighting: **5%**

Short practical assessment held during normal practical time.

On successful completion you will be able to:

- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Developed an introductory knowledge of joint kinematics.

## Principles Assignment

Due: **week 7**

Weighting: **20%**

This will be a group-based assessment and will require the presentation of information in a public speaking arena. It includes a group essay component.

On successful completion you will be able to:

- Further develop an understanding of research
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.

## Physics Class Test

Due: **Week 5**

Weighting: **3%**

Will be administered during lecture time in week 5. Practice questions will be provided to support self-study for the test. Students must attend this lecture

On successful completion you will be able to:

- Understand energy, heat, and electricity concepts in physics

## Physics Practical

Due: **Weeks 2-4**

Weighting: **7%**

Occur during Physics laboratory sessions. Attendance is essential for all sessions.

On successful completion you will be able to:

- Understand energy, heat, and electricity concepts in physics

## Rolling spot

Due: **Weeks 8-11**

Weighting: **5%**

Short practical assessment held during normal practical time in weeks 8-11; no supplementary will be available for this assessment.

On successful completion you will be able to:

- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Developed an introductory knowledge of joint kinematics.
- Understand and perform mobilisation procedures

## Final Practical Exam

Due: **Week 13**

Weighting: **30%**

Will consist of performing procedures as taught in this unit as well as the CHIR113 unit.

On successful completion you will be able to:

- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Developed an introductory knowledge of joint kinematics.
- Understand and perform mobilisation procedures

## Theory Examination

Due: **Exam period**

Weighting: **30%**

This will cover the information covered throughout the entire semester. Question format may include Multiple Choice, True and False, and short answer questions

On successful completion you will be able to:

- Understand energy, heat, and electricity concepts in physics
- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Further develop an understanding of research
- Developed an introductory knowledge of joint kinematics.
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.
- Understand and perform mobilisation procedures

## **Delivery and Resources**

### **Delivery mode**

Will be comprise of a combination of face-to-face lectures, pre-recorded lectures, self-directed learning, and hands-on tutorials:

1. 2 one hour lectures per week; 1 one hour lecture on Thursday and 1 one hour lecture on Friday
2. 2 two hour tutorial per week, weeks 1-13 (except where indicated)
3. 2-3 hours per week self instructional learning

### **Class times and locations**

Lecture 1: Thursday 8-9 C5C T1 (203)

Lecture 2: Friday 8-9 C5C T1 (203)

Tutorials (labs) T1: Monday 13-15, or 15-17 in E5A 320

T2: Friday 13-15, or 15-17 in E5A 320

T3 (Lab): Thursday E7A 114 Times are 9-11, 13-15, 15-17, or 17-19

**NB: Check with the University’s timetable webpage to confirm room locations.**

## Weeks 2 – 4:

Will involve Physics lectures and Laboratory sessions. The in-semester assessment for the physics module is a class test in week 5. Please note the following –

Lectures: are held at their usual times and locations.

Monday Tutorial (T1): will continue as chiropractic practicals (E5A 320).

Friday Tutorial (T3): will not be held

Thursday Labs (T3): will be held on Thursdays in the Physics Laboratory (North-Eastern corner of E7A on the ground floor).

You must wear appropriate clothing for the laboratory including covered footwear.

The CHIR113 physics lab manual includes the CHIR114 physics requirements

## Required and recommended resources

- Prescribed texts
  - Kendall et al. *Muscles: Testing and Function with Posture and Pain* (CDrom). Lippincott
  - Hewitt Paul G. *Conceptual Physics: International Edition*, 11/E ISBN-10: 0321684923 ISBN-13: 9780321684929 Publisher: Benjamin Cummings
- Prescribed Unit Materials
  - Palpation Manual (continuing from CHIR113)
  - Physics Lab Manual (continuing on from CHIR113)
- Recommended READING
  - Biel, Dorn. *Trail Guide to the Body: How to locate Muscles, Bones and More*. Books of Discovery.
  - Lavangie. *Joint Structure and Function*. FA Davis.
  - Leach. *Chiropractic Theories – a Synopsis of Scientific Research*. Williams and Wilkins.
  - Sackett et al. *Evidence-based Medicine: How to Practice and Teach EBM*. Churchill Livingstone.
  - Polgar & Thomas. *Introduction to Research in the Health Sciences*. Churchill Livingstone.



## Unit Schedule

WEEK	TUTORIAL 1 MON	LECTURE 1 THUR	LECTURE 2 FRI	TUTORIAL 2 FRI
Week 1 4-8/4	No Tutorial	Introduction Assignment CTR	Cervical Spine CTR	No Tutorial
Week 2 11-15/8	Semester 1 Revision	PHYSICS Energy, work and power	PHYSICS Heat, temperature and expansion	Physics (Thursday)
Week 3 18-22/8	Cervical LMF	PHYSICS Heat transfer and thermodynamics	PHYSICS Electric potential energy and voltage	Physics (Thursday)
Week 4 25-29/8	Supine Lower Cervical	PHYSICS Electrostatics and electric circuits	"Subluxation" Theories/Listings FT	Physics (Thursday)
Week 5 1-5/9  Class test	Supine Lower Cervical	Ergonomics  CTR	PHYSICS  Class test and review	Supine Upper Cervical
Week 6 8-12/9	Seated Lower Cervical	Muscle Assessment (Pre-recorded) CTR	Adverse Stress (Pre-recorded) CTR	Lower Cervical Palpation <i>Conception Day</i>
Week 7 15-19/9  Spot	Seated Upper Cervical	Soft Tissue Injury and Repair FT	Soft Tissue Techniques (Pre-recorded) FT	Upper Cervical Palpation  Spot Test
Week 8 6-10/10	No Tutorial Labour day	Mobilisation CTR	PRESENTATION	Revision Full Spine Palpation
Week 9 13-17/ 10	Spinal Mobilisation Thoracolumbar	PRESENTATION	PRESENTATION	Spinal Mobilisation Cervical
Week 10 20-24/ 10	Spinal Muscle Assessment/trunk	PRESENTATION	PRESENTATION	Spinal Muscle Assessment/Neck

Week 11 27-31/ 10	Self-stretch techniques/ Massage	PRESENTATION	PRESENTATION	Soft Tissue Techniques/ MRT
Week 12 3-7/11	Soft Tissue Techniques/ MRT	PRESENTATION	Unit Summary and Revision CTR	Soft Tissue Techniques/ XFrctxn
Week 13 10-14/ 11	Revision	No Lecture	Final Practical	Final Practical

## 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](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](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](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/](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](http://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](http://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

- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Further develop an understanding of research
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.

## Assessment tasks

- Spot test
- Principles Assignment
- Rolling spot
- Final Practical Exam
- Theory Examination

## 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

- Further develop an understanding of research

## Assessment tasks

- Principles Assignment
- Theory Examination

## 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

- Understand energy, heat, and electricity concepts in physics
- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Further develop an understanding of research

- Developed an introductory knowledge of joint kinematics.
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.
- Understand and perform mobilisation procedures

## **Assessment tasks**

- Spot test
- Principles Assignment
- Physics Class Test
- Physics Practical
- Rolling spot
- Final Practical Exam
- Theory Examination

## **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**

- Understand energy, heat, and electricity concepts in physics
- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Further develop an understanding of research
- Developed an introductory knowledge of joint kinematics.
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.
- Understand and perform mobilisation procedures

## **Assessment tasks**

- Spot test
- Principles Assignment
- Physics Class Test

- Physics Practical
- Rolling spot
- Final Practical Exam
- Theory Examination

## 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 outcomes

- Understand energy, heat, and electricity concepts in physics
- Further develop an understanding of research
- Developed an introductory knowledge of joint kinematics.
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.

### Assessment tasks

- Spot test
- Principles Assignment
- Physics Class Test
- Physics Practical
- Rolling spot
- Final Practical Exam
- Theory Examination

## 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

- Further develop an understanding of research

## Assessment tasks

- Principles Assignment
- Theory Examination

## 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

- Develop psychomotor skills and theories of soft tissue palpation, assessment, and treatment modalities.
- Understand basic principles of physical examination of joints and further developed joint palpation skills.
- Further develop an understanding of research
- Developed an introductory knowledge of joint kinematics.
- Understand components of the “Chiropractic Lesion” and historical events that are significant to the Chiropractic profession.

## Assessment tasks

- Spot test
- Principles Assignment
- Rolling spot
- Final Practical Exam
- Theory Examination

## 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

- Understand and perform mobilisation procedures

## Assessment tasks

- Rolling spot
- Final Practical Exam
- Theory Examination

## Changes from Previous Offering

No changes from previous offering

## Grade Standards and Attendance Requirements

### Attendance Requirements

You are to attend the tutorial/lab in which you are enrolled. Permission to attend an alternative tutorial requires permission from the unit's convener. CCEA requires 85% attendance. Failing to meet this minimum attendance will have a negative impact on your grade.

### Grades

**Achievement of grades will be based on the following criteria:**

**High Distinction:** provides consistent evidence of deep and critical understanding in relation to the learning outcomes. There is substantial originality and insight in identifying, generating and communicating competing arguments, perspectives or problem solving approaches; critical evaluation of problems, their solutions and their implications; creativity in application.

**Distinction:** provides evidence of integration and evaluation of critical ideas, principles and theories, distinctive insight and ability in applying relevant skills and concepts in relation to learning outcomes. There is demonstration of frequent originality in defining and analysing issues or problems and providing solutions; and the use of means of communication appropriate to the discipline and the audience.

**Credit:** provides evidence of learning that goes beyond replication of content knowledge or skills relevant to the learning outcomes. There is demonstration of substantial understanding of fundamental concepts in the field of study and the ability to apply these concepts in a variety of contexts; plus communication of ideas fluently and clearly in terms of the conventions of the discipline.

**Pass:** provides sufficient evidence of the achievement of learning outcomes. There is



demonstration of understanding and application of fundamental concepts of the field of study; and communication of information and ideas adequately in terms of the conventions of the discipline. The learning attainment is considered satisfactory or adequate or competent or capable in relation to the specified outcomes.

**Fail:** does not provide evidence of attainment of all learning outcomes.

There is missing or partial or superficial or faulty understanding and application of the fundamental concepts in the field of study; and incomplete, confusing or lacking communication of ideas in ways that give little attention to the conventions of the discipline.

**Important NOTE:**

This unit is comprised of 3 components; Chiropractic practical, Chiropractic theory, and Physics. It is necessary to pass each component in order to pass the unit. A raw mark of 60% is the level required for a pass.

**Sometimes it helps to ‘translate’ these descriptions into numbers. So, what we expect from you in this unit, in order for you to attain a specific grade, is outlined below:**

GRADE	Requirements
Pass	A minimum of 60% in each component; PLUS a minimum 60% total raw mark. Must earn passing mark for physics
Credit	A minimum of 60% in each component; PLUS a minimum 70% total raw mark. Must earn passing mark for physics
Distinction	A minimum of 60% in each component; PLUS a minimum 80% total raw mark. Must earn passing mark for physics
High Distinction	A minimum of 60% in each component; PLUS a minimum 85% total raw mark. Must earn passing mark for physics

## Changes since First Published

Date	Description
15/01/2014	The Prerequisites was updated.