



CHIR114

Chiropractic Sciences 2

S2 Day 2017

Dept of Chiropractic

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Disclaimer

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

General Information

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Credit points 3
Prerequisites Admission to BChiroSc and HLTH108(P) and (CHIR113 or CHIR103)
Corequisites
Co-badged status
Unit description This unit is a continuation of the philosophy, art and science of chiropractic as introduced in CHIR113. Further development of psychomotor skills occurs through spinal palpation, muscle assessment, and some soft tissue techniques. Related biomechanics and physics continue and principles of research methodology are practiced.

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:

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Develop psychomotor skills in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.
- Understand energy, heat, and electricity concepts in physics.

General Assessment Information

Competency based assessment

In higher education, assessments must be able to recognise various levels of competencies in order to encourage students to become not only competent, but progress onto developing expertise. A key component of effective assessment in competency-based education is for assessments to be criterion-based using a developmental perspective. Defining the criteria in developmental terms, commonly called milestones or benchmarks, allows programs to determine whether the trainee is on an appropriate 'trajectory'. Milestones provide specific guidance on

trainee progress throughout the continuum of their training program. CHIR114 practical examinations are competency based.

For a more information see: "[Competency-based Assessment, Macquarie University](#)"

Passing the unit

There are 3 components to this unit:

- 1) Chiropractic technique (a minimum of 85% tutorial attendance is suggested in order to gain sufficient practical knowledge)
- 2) Chiropractic theory,
- 3) Physics.

Hurdle Requirements and Serious Attempt Defined

A hurdle is a passing requirement for the unit. A serious attempt is the threshold when a second chance will be provided as an opportunity to meet the hurdle requirement.

CHIR114 has 2 hurdles. The hurdles, their serious attempt threshold, and the method of the second attempt are described below.

Hurdle 1) Chiropractic technique component (comprised of both spot tests and final practical exam): must obtain 50% of the combined available marks.

- Serious attempt: defined as gaining 40-49% of the final chiropractic practical exam.
- Second chance: a supplementary final chiropractic practical exam.

Hurdle 2) Physics theory component (comprised of the physics lab marks, the in-class physics exam, and the final physics theory exam): must obtain 50% of the combined available marks.

- Serious attempt: defined as gaining 40-49% in the final physics theory exam
- Second chance: a supplementary physics theory exam

You will be notified shortly after release of unit results of your eligibility for a hurdle retry. You must make yourself available during the Faculty Supplementary Examination period. For more information refer to the section "Policies and Procedures" within this Unit Guide.

Serious and unavoidable disruption

The University classifies a disruption as **serious and unavoidable** if it:

- could not have reasonably been anticipated, avoided or guarded against by the student; and
- was beyond the student's control; and
- caused substantial disruption to the student's capacity for effective study and/or completion of required work; and
- occurred during an event critical study period and was at least three (3) consecutive days duration, and/or
- prevented completion of a final examination.

Students with a pre-existing disability/health condition or prolonged adverse circumstances may be eligible for ongoing assistance and support. Such support is governed by other policies and may be sought and coordinated through [Campus Wellbeing and Support Services](#).

If you apply for Disruption to Study for your final examination, you must make yourself available during the Faculty Supplementary Examination period. If you are not available at that time, there is no guarantee an additional examination time will be offered. Specific examination dates and times will be determined at a later date.

In this scenario, only your supplementary exam mark will count towards your final exam mark, irrespective of whether or not you attended the final exam in the normal examination period. The submission of a Disruption to Studies form should not be used as a 'just in case' strategy.

Grading descriptors

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.

GRADE	REQUIREMENTS
Pass	A minimum of 50% in each of unit component AND a minimum 50% aggregate raw mark.
Credit	A minimum of 50% in each of unit component AND a minimum 65% aggregate raw mark.
Distinction	A minimum of 50% in each of unit component AND a minimum 75% aggregate raw mark.
High Distinction	A minimum of 50% in each of unit component AND a minimum 85% aggregate raw mark.

Assessment Tasks

Name	Weighting	Hurdle	Due
<u>Chiropractic: Online Quiz</u>	3%	No	18/8/17
<u>Chiropractic: Spot Test1</u>	3%	No	Week 6
<u>Chiropractic: Spot Test2</u>	6%	No	Week 10
<u>Chiropractic:Theory assignment</u>	15%	No	20/10/17
<u>Chiropractic: Practical exam</u>	30%	Yes	week 13
<u>Chiropractic: Theory exam</u>	20%	No	Exam period
<u>Physics: in-class test</u>	3%	No	1/9/17
<u>Physics: Laboratory assessment</u>	10%	No	Week 2-4 inclusive
<u>Physics: Theory exam</u>	10%	Yes	Exam period

Chiropractic: Online Quiz

Due: 18/8/17

Weighting: 3%

Multiple choice quiz delivered via iLearn

On successful completion you will be able to:

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.

Chiropractic: Spot Test1

Due: **Week 6**

Weighting: **3%**

Practical assessment during Technique lab, week 5

On successful completion you will be able to:

- Develop psychomotor skills in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.

Chiropractic: Spot Test2

Due: **Week 10**

Weighting: **6%**

Practical assessment during Technique lab, week 10

On successful completion you will be able to:

- Develop psychomotor skills in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.

Chiropractic: Theory assignment

Due: **20/10/17**

Weighting: **15%**

Assignment topic will be discussed in Chiropractic Tutorials and Lectures (weeks 4 - 6).

On successful completion you will be able to:

- Develop theoretical knowledge related to the assessment and treatment of joints and soft

tissues.

- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.

Chiropractic: Practical exam

Due: **week 13**

Weighting: **30%**

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

Occurring week 13 and will consist of performing procedures as taught in the unit.

On successful completion you will be able to:

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Develop psychomotor skills in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.

Chiropractic: Theory exam

Due: **Exam period**

Weighting: **20%**

These will cover the discipline specific content of the chiropractic material. Question format will be mixed and may include Multiple Choice, True and False, and short answer questions.

Chiropractic and Physics will be written at the same exam time.

On successful completion you will be able to:

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.
- Understand energy, heat, and electricity concepts in physics.

Physics: in-class test

Due: **1/9/17**

Weighting: **3%**

Final exam preparation test.

On successful completion you will be able to:

- Understand energy, heat, and electricity concepts in physics.

Physics: Laboratory assessment

Due: **Week 2-4 inclusive**

Weighting: **10%**

These will 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.

Physics: Theory exam

Due: **Exam period**

Weighting: **10%**

This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)

These will cover the discipline specific content of the physics material. Question format MAY be mixed and may include Multiple Choice, True and False, and short answer questions.

Chiropractic and Physics will be written at the same exam time.

On successful completion you will be able to:

- Understand energy, heat, and electricity concepts in physics.

Delivery and Resources

Technology Used and Required: iLearn, Echo360, Practical Audio/Visual Equipment, and Electronic Lectern

Delivery mode

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

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

Class times and locations: Chiropractic

Lecture 1: Thursday 8-9 am; for location see timetable

Lecture 2: Friday 8-9 am: for location see timetable

Tutorials 1 & 2: Monday 13-15, or 15-17: for location see timetable

Friday 13-15, or 15-17:for location see timetable

Tutorial 3: Physics (see below)

Physics (tutorial 3)

Weeks 2 – 4 inclusive will involve Physics lectures and Laboratory sessions. Please note the following –

Lectures: are held at their usual times and locations.

Monday Tutorial 1: will continue as chiropractic practicals.

Friday Tutorial 2: will be replaced by Tutorial 3; Physics Laboratory sessions held in E7A 114, that is, the North-Eastern corner of E7A on the ground floor.

Tutorial 3: See Timetable for schedule

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

Required and recommended resources

Prescribed texts

Hewitt Paul G. *Conceptual Physics: International Edition*, 11/E ISBN-10: 0321684923
ISBN-13: 9780321684929 Publisher: Benjamin Cummings

Prescribed Unit Materials

Palpation Manual (Course notes)

Physics Lab Manual

Recommended READING

Competency based assessment: Competency-based Assessment, Macquarie University
<https://staff.mq.edu.au/public/download/?id=40618>

Kendall et al. Muscles: Testing and Function, with Posture and Pain (Hardcover) by Florence Peterson Kendall, Elizabeth Kendall McCreary (CDrom). Lippincott

Biel, Dorn. Trail Guide to the Body: How to locate Muscles, Bones and More. Books of Discovery.

Oatis C. Kinesiology: the mechanics & pathomechanics of human movement 2 ed. LWW

Sackett & Straus, 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

See CHIR114 iLearn page for unit schedule

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_2016.html

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

Complaint Management Procedure for Students and Members of the Public http://www.mq.edu.au/policy/docs/complaint_management/procedure.html

Disruption to Studies Policy (in effect until Dec 4th, 2017): http://www.mq.edu.au/policy/docs/disruption_studies/policy.html

Special Consideration Policy (in effect from Dec 4th, 2017): <https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/special-consideration>

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/

Results

Results shown in *iLearn*, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your

student email address and will be made available in [eStudent](#). For more information visit [ask.mq.edu.au](#).

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://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

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

- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.

Assessment tasks

- Chiropractic: Theory assignment
- Physics: in-class test
- Physics: Laboratory assessment
- Physics: Theory exam

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 in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Understand energy, heat, and electricity concepts in physics.

Assessment tasks

- Chiropractic: Online Quiz
- Chiropractic: Spot Test1
- Chiropractic: Spot Test2
- Chiropractic: Practical exam
- Chiropractic: Theory exam
- Physics: Laboratory assessment

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 outcomes

- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.
- Understand energy, heat, and electricity concepts in physics.

Assessment tasks

- Chiropractic: Online Quiz
- Chiropractic: Spot Test1
- Chiropractic: Spot Test2
- Chiropractic: Theory assignment
- Chiropractic: Practical exam
- Chiropractic: Theory exam
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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

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Develop psychomotor skills in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.
- Understand energy, heat, and electricity concepts in physics.

Assessment tasks

- Chiropractic: Online Quiz
- Chiropractic: Spot Test1
- Chiropractic: Spot Test2
- Chiropractic: Theory assignment

- Chiropractic: Practical exam
- Chiropractic: Theory exam
- Physics: in-class test
- Physics: Laboratory assessment
- Physics: Theory exam

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

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.

Assessment tasks

- Chiropractic: Online Quiz
- Chiropractic: Spot Test1
- Chiropractic: Spot Test2
- Chiropractic: Theory assignment
- Chiropractic: Practical exam
- Chiropractic: Theory exam
- Physics: in-class test
- Physics: Laboratory assessment
- Physics: Theory exam

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

- Develop theoretical knowledge related to the assessment and treatment of joints and soft tissues.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.
- Understand energy, heat, and electricity concepts in physics.

Assessment tasks

- Chiropractic: Online Quiz
- Chiropractic: Spot Test1
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- Chiropractic: Theory assignment
- Chiropractic: Practical exam
- Chiropractic: Theory exam
- Physics: in-class test
- Physics: Laboratory assessment
- Physics: Theory exam

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 in patient assessment and therapeutic intervention within a framework of ethical patient interaction.
- Demonstrate practical use of anatomical knowledge related to patient assessment and basic intervention.
- Demonstrate research skills at the level of closed inquiry with a high degree of structured guidance as part of a research skills development (RSD) progression.

Assessment tasks

- Chiropractic: Online Quiz
- Chiropractic: Spot Test1

- Chiropractic: Spot Test2
- Chiropractic: Theory assignment
- Chiropractic: Practical exam
- Physics: in-class test
- Physics: Laboratory assessment

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

- Develop psychomotor skills in patient assessment and therapeutic intervention within a framework of ethical patient interaction.

Assessment task

- Physics: Laboratory assessment

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

- Understand energy, heat, and electricity concepts in physics.

Assessment task

- Physics: Laboratory assessment

Changes from Previous Offering

Chiropractic technique: iLearn Quiz has been added to assist student understanding early in the semester (worth 3%)

Chiropractic technique: Students will gain formal feedback for each tutorial in the form of a tutorial feedback logbook

Physics: Students will undertake an in-class theory examination to help prepare for the final examination (worth 3%)