

CHIR931

Diagnosis and Management 1

S1 Day 2017

Dept of Chiropractic

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General Information

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Credit points

4

Prerequisites

CHIR874 and CHIR892 and CHIR917 and CHIR919

Corequisites

Co-badged status

Unit description

The focus of this unit is to continue to develop students' clinical reasoning skills, by exposing them to a range of clinical scenarios, medical or/and chiropractic, which may be encountered in chiropractic practice. It aims to act as a 'virtual clinic', exposing students to a standardised range of clinical experiences. Students go over the case studies prior to the tutorials, and discuss them as a student-based group activity in the tutorials, in order to imitate the independence required in clinical practice. The clinical management of the patient includes nutritional, pharmacological and mental health interventions, and thus these studies are included in this unit. CHIR931 articulates with CHIR932, with the two units together covering the full spectrum of clinically relevant conditions for chiropractors.

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:

Demonstrate competence in integrating all presented data (including history, physical examination, diagnostic imaging and – where relevant - other investigative procedures), using problem solving techniques, in order to successfully diagnose and manage adult (including geriatric) patients in chiropractic care, using 'evidence-informed practice'. Apply an understanding of commonly presented health problems exhibited by the paediatric population to a range of clinical scenarios, in order to diagnose and determine a plan of management for that patient, using 'evidence-informed practice' Demonstrate an understanding of commonly presented mental health problems in a range of clinical scenarios, and how the patient's mental health status can influence their clinical presentation, their therapeutic relationship with the chiropractor and the clinical outcomes.

Demonstrate competence in interpreting and reporting on a wide range of diagnostic images

Demonstrate an understanding of the ethical and safety issues related to drug usage with their pharmacodynamics, pharmacokinetics and mechanisms of action, and explain

the significance of toxicity, adverse reactions, contraindications and side effects.

Use current research to critically evaluate present nutritional information, issues and trends

General Assessment Information

Attendance Requirements

A minimum of 80% attendance at tutorial classes is required in order to successfully complete this unit.

You must attend the class in which you enrolled. You must not exchange their class time. In special circumstances, you may apply for requests regarding changes. These requests are to be submitted to the unit convenor.

Examinations

The University Examination period for Semester 1, 2017 is from June 12th to June 30th 2017.

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.

You are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. You are expected to ensure that you are available until the end of the teaching semester that is the final day of the official examination period.

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 disruption to studies. Information about unavoidable disruption and the disruption to studies process is available at http://students.mq.edu.au/student_admin/exams/disruption_to_studies/, applied for through www.ask.mq.edu.au within 5 days of the disruption

If you attend and complete an examination or assessment you are declaring that you are fit to sit that assessment and disruption from studies will not normally be granted.

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 are granted a supplementary exam via the Disruption to Studies process, you will have to write a supplementary exam in the supplementary exam period. The supplementary exam may be in a different format to the original exam and you will be notified of this when you are granted a supplementary exam. Only your supplementary exam mark will be counted towards your final exam mark.

If you apply for Disruption to Study for your final examination, you \underline{must} make yourself available for the week of July 24 – 28, 2017. 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.

Assessment Tasks

Name	Weighting	Hurdle	Due
Online Quizzes	5%	No	Weekly
Pharmacology Assignment	10%	No	5 May, 17:00h
Case Study Examination	20%	No	Week 10
Radiology Slide Examination	15%	No	13
Written Examination	50%	No	exam period

Online Quizzes

Due: Weekly Weighting: 5%

Read through the assigned online quiz case studies from the required text: Beirman R. Cases in Differential Diagnosis for the Physical and Manipulative Therapies. Churchill Livingstone, 2012. The list can be found in this unit outline under "Unit Schedule: Tutorial: Case Studies & Evidence Informed Practice" (page 9)

These are case studies of a more medical nature, rather than the chiropractic focus of the case studies done in tutorials. After you have gone through the case study questions in the text, and have a good understanding of the case, go online to access the quiz associated with the case studies. Please be aware that these quizzes do contain questions based on the list of online case studies, as well as a few radiology questions Hazel Jenkins will add based on the other case studies you have seen that week. The quiz is limited to 10mins, and students only have one attempt.

On successful completion you will be able to:

- Demonstrate competence in integrating all presented data (including history, physical examination, diagnostic imaging and where relevant other investigative procedures), using problem solving techniques, in order to successfully diagnose and manage adult (including geriatric) patients in chiropractic care, using 'evidence-informed practice'.
- Apply an understanding of commonly presented health problems exhibited by the paediatric population to a range of clinical scenarios, in order to diagnose and determine a plan of management for that patient, using 'evidence-informed practice'
- Demonstrate competence in interpreting and reporting on a wide range of diagnostic images

Pharmacology Assignment

Due: 5 May, 17:00h Weighting: 10%

Each student will receive a patient profile which contains the list of 3 medications taken by this patient. Based on the information provided answer the following:

Note: If more than 3 medications, choose 3 to answer the questions below.

- 1) List drug indications
- 2) Does this combination of drugs point to a specific condition?
- 3) List up to 5 common adverse effects
- 4) Point out if any of the drugs can mimic musculoskeletal symptoms and signs. How this can affect chiropractic therapy/advice.
- 5) Choose one of the drugs and describe its mechanism of action. Are there any other drugs with the same mechanism of action? Give one example.

Important: Please use your own words. A copied figure will not be accepted.

6) Where have you found the information to answer this assignment.

On successful completion you will be able to:

Demonstrate an understanding of the ethical and safety issues related to drug usage
with their pharmacodynamics, pharmacokinetics and mechanisms of action, and explain
the significance of toxicity, adverse reactions, contraindications and side effects.

Case Study Examination

Due: Week 10 Weighting: 20%

A summative assessment of case study diagnosis and management, using the clinical algorithm

On successful completion you will be able to:

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- Apply an understanding of commonly presented health problems exhibited by the
 paediatric population to a range of clinical scenarios, in order to diagnose and determine
 a plan of management for that patient, using 'evidence-informed practice'
- Demonstrate an understanding of commonly presented mental health problems in a range of clinical scenarios, and how the patient's mental health status can influence their clinical presentation, their therapeutic relationship with the chiropractor and the clinical outcomes.
- Demonstrate competence in interpreting and reporting on a wide range of diagnostic images
- Demonstrate an understanding of the ethical and safety issues related to drug usage
 with their pharmacodynamics, pharmacokinetics and mechanisms of action, and explain
 the significance of toxicity, adverse reactions, contraindications and side effects.
- Use current research to critically evaluate present nutritional information, issues and trends

Radiology Slide Examination

Due: 13

Weighting: 15%

A slide examination, predominantly related to XRay imaging, will be held in week 13.

On successful completion you will be able to:

Demonstrate competence in integrating all presented data (including history, physical examination, diagnostic imaging and – where relevant - other investigative procedures), using problem solving techniques, in order to successfully diagnose and manage adult (including geriatric) patients in chiropractic care, using 'evidence-informed practice'.

- Apply an understanding of commonly presented health problems exhibited by the
 paediatric population to a range of clinical scenarios, in order to diagnose and determine
 a plan of management for that patient, using 'evidence-informed practice'
- Demonstrate competence in interpreting and reporting on a wide range of diagnostic images

Written Examination

Due: **exam period** Weighting: **50%**

Written examination on nutrition (20%), pharmacology (10%) and mental health (20%)

On successful completion you will be able to:

- Demonstrate an understanding of commonly presented mental health problems in a range of clinical scenarios, and how the patient's mental health status can influence their clinical presentation, their therapeutic relationship with the chiropractor and the clinical outcomes.
- Demonstrate an understanding of the ethical and safety issues related to drug usage
 with their pharmacodynamics, pharmacokinetics and mechanisms of action, and explain
 the significance of toxicity, adverse reactions, contraindications and side effects.
- Use current research to critically evaluate present nutritional information, issues and trends

Delivery and Resources

Delivery modes

Class	Date and time	Topic
Tutorial	Mon 11-1.00pm, or Mon 1.00-3pm, or Tues 2-4.00pm, or Wed 9-11am	Clinical Case studies – Diagnosis, diagnostic imaging and management Each week students will be presented with a selection of clinical scenarios, which will initiate the clinical problem solving activities for this class. Appropriate images will be examined and discussed. They may include cases from the paediatric, adult and geriatric populations. The management of the cases will be discussed. Focus will be on the role of the chiropractor.
Lecture 1	Thurs 9-10	Clinical Pharmacology Pharmacology provides a basic understanding of the range of therapeutic drug classes, the names of commonly used pharmacological agents in the treatment of common disorders, the ethical and safety issues related to drug usage and explains the significance of toxicity, adverse reactions, contraindications and side effects of drugs.

Lecture 2	Thurs 10-11	Nutrition Nutrition provides a firm foundation in energy and metabolism and the science of nutrition. It explores current nutritional trends and the perplexing question of what dietary advice should be based on.
Lecture 3	Friday 9-10	Mental health Students will be introduced to health psychology and the spectrum of wellness. They will explore the many models of health psychology. Abnormal psychology as defined by the DSM-V will be discussed. The threshold for identifying psychological distress, the process of screening, and the referral process will be elucidated

3-4 hours per week related activities

Unit Web Page

You can log in to <u>iLearn</u> System via the link listed below:

http://learn.mq.edu.au

All lecture materials will be posted on ilearn, and there is also a link to ECHO360 for **audio or audiovisual** (where available) recordings of the lectures.

Required and Recommended Resources

Core:

Beirman R. Cases in Differential Diagnosis for the Physical and Manipulative Therapies. Churchill Livingstone, 2012

Highly recommended:

Souza, T. Differential Diagnosis for the Chiropractor

Yochum, T., & Rowe, L., 20, Essentials of Skeletal Radiology – Vols I & II, (ed.) Lippincott, William & Wilkins, Baltimore.

Unit Schedule

Policies and Procedures

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. 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 <u>Learning and Teaching Category</u> 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 <a href="extraction-color: blue} eStudent. For more information visit ask.m q.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 <u>Disability Service</u> 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 <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Demonstrate competence in integrating all presented data (including history, physical examination, diagnostic imaging and where relevant other investigative procedures), using problem solving techniques, in order to successfully diagnose and manage adult (including geriatric) patients in chiropractic care, using 'evidence-informed practice'.
- Apply an understanding of commonly presented health problems exhibited by the
 paediatric population to a range of clinical scenarios, in order to diagnose and determine
 a plan of management for that patient, using 'evidence-informed practice'
- Demonstrate an understanding of commonly presented mental health problems in a range of clinical scenarios, and how the patient's mental health status can influence their clinical presentation, their therapeutic relationship with the chiropractor and the clinical outcomes.
- Demonstrate competence in interpreting and reporting on a wide range of diagnostic images
- Demonstrate an understanding of the ethical and safety issues related to drug usage
 with their pharmacodynamics, pharmacokinetics and mechanisms of action, and explain
 the significance of toxicity, adverse reactions, contraindications and side effects.
- Use current research to critically evaluate present nutritional information, issues and trends

Assessment tasks

- Online Quizzes
- Pharmacology Assignment
- Case Study Examination
- Radiology Slide Examination
- Written Examination

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

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Assessment tasks

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- · Pharmacology Assignment
- Case Study Examination
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PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is

the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

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PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

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PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

 Demonstrate competence in integrating all presented data (including history, physical examination, diagnostic imaging and – where relevant - other investigative procedures),

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PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcomes

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Grading

Achievement of grades will be based on the following criteria:

Grade	Percentage
Fail	<50%
Pass	50 – 64%
Credit	65 - 74%
Distinction	75 - 84%
High Distinction	85 - 100%

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.