

CHIR114

Chiropractic Sciences 2

S2 Day 2016

Dept of Chiropractic

Contents

General Information	2
Learning Outcomes	3
General Assessment Information	3
Assessment Tasks	4
Delivery and Resources	7
Unit Schedule	9
Policies and Procedures	10
Graduate Capabilities	11
Changes from Previous Offering	16
Disruption to Study Policy	16
Grade Standards and Attendance Requ	irem
ents	17
Hurdle Requirements and Serious Atten	npt D
efined	18

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

Co-badged status

Unit convenor and teaching staff **Unit Convenor Curtis Rigney** curtis.rigney@mq.edu.au Contact via curtis.rigney@mq.edu.au C5C 367 Thursday 9-11am Physics Professor Deb Kane deb.kane@mq.edu.au Lecturer & Tutor Fabiano Truglio fabiano.truglio@mq.edu.au Tutor Camille Rahme camille.rahme@mq.edu.au Tutor Clinton Rotondo clinton.rotondo@mq.edu.au Tutor Melanie Xabregas melanie.xabregas@mq.edu.au Physics Lab Officer Danny Cochran danny.cochran@mq.edu.au Credit points 3 Prerequisites Admission to BChiroSc and HLTH108(P) and (CHIR113(P) or CHIR103(P)) Corequisites

2

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:

Understand energy, heat, and electricity concepts in physics

Develop the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.

Further develop an understanding and practice of research methodologies.

Developed an introductory knowledge of joint kinematics.

Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

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: curtiss.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. Please note that late submissions of the "Principles Assignment" will NOT be accepted.

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.
- Chiropractic Assignments: Results will be posted on iLearn during the exam period.
- 3. Principles class test results will be posted on iLearn and will be available for collection by then

end of week 8.

- 4. Physics class test will be posted on iLearn by end week 8.
- 5. Practical Examination (OSCE): Results will not be posted on iLearn during the exam period.
- 6. 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 2016 is from Monday 14th November to Friday 2nd 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.mg.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
Principles Assignment	15%	week 7
Spot test	5%	week 7
In-class Principles exam	5%	Week 5
Physics Practical	7%	Weeks 2-4
Physics Class Test (In Class)	3%	Week 5
Rolling spot	5%	Weeks 8-11
Final Practical Exam	30%	Week 13
ChiropracticTheory Examination	23%	Exam period
Physics Theory Examination	7%	Exam period

Principles Assignment

Due: week 7 Weighting: 15%

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:

· Understand energy, heat, and electricity concepts in physics

Spot test

Due: week 7 Weighting: 5%

Short practical assessment held during normal practical time

On successful completion you will be able to:

· Understand energy, heat, and electricity concepts in physics

In-class Principles exam

Due: Week 5 Weighting: 5%

Attendance is mandatory for this short answer/essay assessment. Supplementary assessments will be offered in an oral format (VIVA) if awarded. The subject matter will be related to chiropractic principles.

On successful completion you will be able to:

- Develop the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- Developed an introductory knowledge of joint kinematics.

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:

 Develop the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation. · Developed an introductory knowledge of joint kinematics.

Physics Class Test (In Class)

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:

- · Further develop an understanding and practice of research methodologies.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

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 the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- · Developed an introductory knowledge of joint kinematics.

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 the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- Developed an introductory knowledge of joint kinematics.

ChiropracticTheory Examination

Due: **Exam period** Weighting: **23%**

This will cover the information covered throughout the entire semester. Question format may

include Multiple Choice, True and False, and short answer questions. Physics material will also be assessed within this assessment **Actual weighting is 22.5**%

On successful completion you will be able to:

- Develop the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- · Further develop an understanding and practice of research methodologies.
- · Developed an introductory knowledge of joint kinematics.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

Physics Theory Examination

Due: **Exam period** Weighting: **7%**

Short answer questions that will demonstrate your understanding of the physics principles taught in the semester. **Actual weighting is 7.5**%

On successful completion you will be able to:

· Understand energy, heat, and electricity concepts in physics

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

<u>Lecture 1</u>: Thursday 8-9 C5C T1 (203)

<u>Lecture 2</u>: Friday 8-9 C5C T1 (203)

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

T2: Friday 9-11, or 11-13 in E5A 320

T3 (Lab): Friday 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.

NB: 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 (T2): will not be held

<u>Friday Tutorials (T3) (Physics Labs):</u> 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	LECTURE 1 THUR	LECTURE 2	TUTORIAL 2 FRI
Week 1 1-5/8	No Tutorial	Introduction Assignment CTR	Cervical Spine CTR	Revision
Week 2 8-12/8	Cervical LMF	PHYSICS Energy, work and power	PHYSICS Heat, temperature and expansion	Physics Lab
Week 3 15-19/8	Supine Lower Cervical (pg 38-39)	PHYSICS Heat transfer and thermodynamics	PHYSICS Electric potential energy and voltage	Physics Lab
Week 4 22-26/8	Supine Lower Cervical	PHYSICS Electrostatics and electric circuits	Soft Tissue Injury and Repair FT	Physics Lab
Week 5 29/8-2/9	Supine Upper Cervical (pg 39-42)	In Class Test CTR	PHYSICS Class test and review	Supine Upper Cervical
Week 6 5-9/9	Seated Lower Cervical (pg 42-43)	Muscle Assessment CTR	"Subluxation" Theories/Listings FT	Seated Lower Cervical
Week 7 12-16/9	Seated Upper Cervical (pg 44-45)	Adverse Stress	Soft Tissue Techniques FT	Upper Cervical Palpation Spot Test
Week 8 3-7/10	Labour Day	Mobilisation CTR	PRESENTATION	Revision Full Spine Palpation

Week 9 10-14/10 Roll Spot	Spinal Mobilisation Thoracolumbar (pg 63-65)	PRESENTATION	PRESENTATION	Spinal Mobilisation Cervical
Week 10 17-21/10 Roll Spot	Spinal Muscle Assessment/ trunk (pg 46-57)	PRESENTATION	PRESENTATION	Spinal Muscle Assessment/ Neck
Week 11 24-28/10 Roll Spot	Self-stretch techniques/ Massage (pg 58-62)	PRESENTATION	PRESENTATION	Soft Tissue Techniques/ MRT
Week 12 31/10-4/ 11	Soft Tissue Techniques/ MRT	PRESENTATION	Unit Summary CTR	Soft Tissue Techniques/ X-Friction
Week 13 7-11/11	Revision	Year summary CTR	Revision CTR	Final Practical

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

New Assessment Policy in effect from Session 2 2016 http://mq.edu.au/policy/docs/assessment/policy_2016.html. For more information visit http://students.mq.edu.au/events/2016/07/19/new_assessment_policy_in_place_from_session_2/

Assessment Policy prior to Session 2 2016 http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy prior to Session 2 2016 http://mq.edu.au/policy/docs/grading/policy.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 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 <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 <a href="extraction-color: blue} 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

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 and practice of research methodologies.

Assessment tasks

- · Principles Assignment
- ChiropracticTheory Examination

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 the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- Further develop an understanding and practice of research methodologies.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

Assessment tasks

- · Physics Practical
- Rolling spot
- Final Practical Exam
- ChiropracticTheory 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 and practice of research methodologies.

Assessment tasks

- · Principles Assignment
- ChiropracticTheory 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 the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- · Further develop an understanding and practice of research methodologies.
- Developed an introductory knowledge of joint kinematics.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

Assessment tasks

- Principles Assignment
- Spot test
- · In-class Principles exam
- · Physics Practical
- Rolling spot
- · Final Practical Exam
- ChiropracticTheory 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 the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- Further develop an understanding and practice of research methodologies.
- · Developed an introductory knowledge of joint kinematics.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

Assessment tasks

- · Principles Assignment
- Spot test
- · In-class Principles exam
- Physics Practical
- Physics Class Test (In Class)
- Rolling spot
- · Final Practical Exam
- ChiropracticTheory Examination
- Physics 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 and practice of research methodologies.
- · Developed an introductory knowledge of joint kinematics.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

Assessment tasks

- Principles Assignment
- Spot test

- · Physics Practical
- Physics Class Test (In Class)
- Rolling spot
- Final Practical Exam
- ChiropracticTheory Examination
- · Physics 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 the theories and psychomotor skills related to the assessment and treatment of joints and soft tissues; including mobilisation.
- · Further develop an understanding and practice of research methodologies.
- · Developed an introductory knowledge of joint kinematics.
- Understand components of chiropractic principles and historical events that are significant to the Chiropractic profession.

Assessment tasks

- · Principles Assignment
- · In-class Principles exam
- · Physics Practical
- Rolling spot
- Final Practical Exam
- ChiropracticTheory 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:

Assessment tasks

- · Rolling spot
- Final Practical Exam
- ChiropracticTheory Examination

Changes from Previous Offering

No changes from previous offering

Disruption to Study Policy

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 a supplementary examination is granted as a result of the disruption to studies process the examination will be scheduled after the conclusion of the official examination period. (Individual Faculties may wish to signal when the Faculty Supplementary exams are normally scheduled.)

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. 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.

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.

Grade Standards and Attendance Requirements

Attendance Requirements

An attendance rate of **80%** is required to pass this unit. 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.

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.

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	Meeting the hurdle requirements
Credit	Meeting the hurdle requirements; PLUS a minimum 70% total raw mark.
Distinction	Meeting the hurdle requirements; PLUS a minimum 80% total raw mark.
High Distinction	Meeting the hurdle requirements; PLUS a minimum 85% total raw mark.

Hurdle Requirements and Serious Attempt Defined

A hurdle is a passing requirement(s) 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 3 hurdles. The hurdles, their serious attempt threshold, and the method of the second attempt are described below.

Hurdle 1) Chiropractic Skills Component (comprised of 2 spot tests and final practical exam): must obtain 60% of the combined available marks/ Serious attempt; defined as reaching 10% of hurdle requirement/ Second chance; a supplementary final practical

Hurdle 2) Chiropractic Theory Component (comprised of the in-class principles exam, the principles assignment, and the chiropractic theory exam): must obtain 60% of the combined available marks/ Serious attempt; defined as reaching 10% of hurdle requirement/ Second chance; a supplementary theory examination

Hurdle 3) Physics Component (comprised of the physics lab marks, the in-class physics exam, and the physics theory exam): must obtain 50% of the combined available marks/ Serious attempt; defined as reaching 10% of hurdle requirement/ Second chance; a supplementary physics exam