



PHTY8100

Applied Sciences for Physiotherapy A

Session 2, Weekday attendance, North Ryde 2021

Archive (Pre-2022) - Department of Health Professions

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Session 2 Learning and Teaching Update

The decision has been made to conduct study online for the remainder of Session 2 for all units WITHOUT mandatory on-campus learning activities. Exams for Session 2 will also be online where possible to do so.

This is due to the extension of the lockdown orders and to provide certainty around arrangements for the remainder of Session 2. We hope to return to campus beyond Session 2 as soon as it is safe and appropriate to do so.

Some classes/teaching activities cannot be moved online and must be taught on campus. You should already know if you are in one of these classes/teaching activities and your unit convenor will provide you with more information via iLearn. If you want to confirm, see the list of [units with mandatory on-campus classes/teaching activities](#).

Visit the [MQ COVID-19 information page](#) for more detail.

General Information

Unit convenor and teaching staff

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Credit points

10

Prerequisites

Admission to DPT

Corequisites

Co-badged status

Unit description

This unit will build upon your prerequisite and assumed knowledge with a focus on exercise science and the cardiorespiratory system in the context of physiotherapy. You will examine the physiological responses and adaptations to inactivity, physical activity and exercise training. Comparisons in exercise response and adaptations to training will be made in healthy individuals and those with impairments in cardiorespiratory fitness. You will acquire skills in exercise testing and exercise prescription required for physiotherapy practice. Additionally, this unit will provide you with an introduction to physiotherapy assessment and management of cardiorespiratory impairments.

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:

ULO1: Explain the range of physiological responses to exercise and exercise training in

different population groups including healthy individuals and those with common health conditions. (Scientist and Scholar)

ULO2: Discuss the principles of exercise testing and a person-centred approach to exercise prescription including strategies to promote participation that considers an individual's impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)

ULO3: Competently select, perform and interpret tests commonly used in physiotherapy practice to assess exercise capacity and cardiorespiratory fitness in individuals who are either active or sedentary as well as those with common health conditions. (Clinical Practitioner)

ULO4: Design and progress an evidence-based exercise program to optimise an individual's health and wellbeing that considers their impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)

ULO5: Competently assess breathing and provide safe and effective treatment for common cardiorespiratory impairments. (Clinical Practitioner)

General Assessment Information

Information concerning Macquarie University's [Assessment Policy](#) is available at policies.mq.edu.au. Grade descriptors and other information concerning grading requirements are contained in [Schedule 1](#) of the Macquarie University Assessment Policy.

To pass this unit, you must have demonstrated sufficient evidence of achievement of the learning outcomes. Further details for each assessment task will be available on iLearn, including marking rubrics.

All final grades in the Department of Health Professions are determined by the Faculty of Medicine, Health and Human Sciences Assessment Committee, and are approved by the Faculty Board. They are not the sole responsibility of the Unit Convenor. You will be awarded an Assessment Grade plus a Standardised Numerical Grade (SNG). The SNG is not necessarily a summation of the individual assessment components. The final grade and SNG that are awarded reflect the corresponding grade descriptor in Schedule 1 of the Assessment Policy. If there is a lack of sufficient evidence demonstrating that a student has met the required level of achievement in all learning outcomes they will be awarded a Fail grading with an assigned mark of 49 or less.

Extensions for Assessment Tasks

Applications for assessment task extensions may be considered for short-term, unexpected, serious, and unavoidable circumstances affecting assessment. Applications must be submitted via www.ask.mq.edu.au. For further details please refer to the [Special Considerations Policy](#). You can also find out more on the MQ Student Portal at the following link: <https://students.mq.edu>

[u.au/study/assessment-exams/special-consideration](https://unitguides.mq.edu.au/study/assessment-exams/special-consideration)

Should you encounter any personal issues or concerns in regard to health and wellbeing during your studies you can also gain personal support and advice on campus. Please see the following link for further information: <https://students.mq.edu.au/support/personal>

Late Submission of Work

All assignments which are officially received after the due date, and where no extension has been granted by the Unit Convenor, will incur a deduction of 5% of the overall assessment weighting for the first day, and 5% for each subsequent day, including the actual day on which the work is received. Assessments received 5 days or more beyond the due date, without an approved extension, will be awarded a maximum of 50% of the overall assessment marks. Weekends and public holidays are included. For example:

Due Date	Received	Days Late	Deduction	Raw Mark	Final Mark
Friday, 14th	Monday, 17th	3	15%	75%	60%

Hurdle Assessment

Mastery register is a hurdle assessment. A hurdle requirement is an activity for which a minimum level of performance or participation is a condition of passing the unit in which it occurs. You must obtain a pass grade in this assessment as a minimum requirement for passing the unit. Should you fail to obtain a pass grade upon your initial attempt, one supplementary opportunity will be provided to demonstrate that you meet the minimum requirements for this assessment. Should you still not meet a pass standard a Fail (Hurdle) grade will be awarded, as indicated by a FH grade upon your transcript.

Assessment Tasks

Name	Weighting	Hurdle	Due
Quiz 1	20%	No	Week 5
Quiz 2	20%	No	Week 9
Clinical simulation exam	30%	No	Week 14/15/16
Viva exam	30%	No	Week 14/15/16
Mastery register	0%	Yes	Week 14

Quiz 1

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 10 hours

Due: **Week 5**

Weighting: **20%**

The quiz will include short-answer questions on unit content delivered up to the end of the week prior to the quiz.

On successful completion you will be able to:

- Explain the range of physiological responses to exercise and exercise training in different population groups including healthy individuals and those with common health conditions. (Scientist and Scholar)
- Discuss the principles of exercise testing and a person-centred approach to exercise prescription including strategies to promote participation that considers an individual's impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)

Quiz 2

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 12 hours

Due: **Week 9**

Weighting: **20%**

The quiz will include short-answer questions on unit content delivered up to the end of the week prior to the quiz.

On successful completion you will be able to:

- Explain the range of physiological responses to exercise and exercise training in different population groups including healthy individuals and those with common health conditions. (Scientist and Scholar)
- Discuss the principles of exercise testing and a person-centred approach to exercise prescription including strategies to promote participation that considers an individual's impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)
- Competently select, perform and interpret tests commonly used in physiotherapy practice to assess exercise capacity and cardiorespiratory fitness in individuals who are either active or sedentary as well as those with common health conditions. (Clinical

Practitioner)

- Competently assess breathing and provide safe and effective treatment for common cardiorespiratory impairments. (Clinical Practitioner)

Clinical simulation exam

Assessment Type ¹: Clinical performance evaluation

Indicative Time on Task ²: 20 hours

Due: **Week 14/15/16**

Weighting: **30%**

The clinical simulation exam involves both practical demonstration of cardiorespiratory assessment and treatment, as well as a viva component.

On successful completion you will be able to:

- Explain the range of physiological responses to exercise and exercise training in different population groups including healthy individuals and those with common health conditions. (Scientist and Scholar)
- Discuss the principles of exercise testing and a person-centred approach to exercise prescription including strategies to promote participation that considers an individual's impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)
- Competently select, perform and interpret tests commonly used in physiotherapy practice to assess exercise capacity and cardiorespiratory fitness in individuals who are either active or sedentary as well as those with common health conditions. (Clinical Practitioner)
- Design and progress an evidence-based exercise program to optimise an individual's health and wellbeing that considers their impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)
- Competently assess breathing and provide safe and effective treatment for common cardiorespiratory impairments. (Clinical Practitioner)

Viva exam

Assessment Type ¹: Viva/oral examination

Indicative Time on Task ²: 20 hours

Due: **Week 14/15/16**

Weighting: **30%**

During the viva exam you will be asked questions about your understanding and application of the fundamental knowledge related to physiotherapy assessment and management that has been covered in this unit.

On successful completion you will be able to:

- Explain the range of physiological responses to exercise and exercise training in different population groups including healthy individuals and those with common health conditions. (Scientist and Scholar)
- Discuss the principles of exercise testing and a person-centred approach to exercise prescription including strategies to promote participation that considers an individual's impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)
- Competently select, perform and interpret tests commonly used in physiotherapy practice to assess exercise capacity and cardiorespiratory fitness in individuals who are either active or sedentary as well as those with common health conditions. (Clinical Practitioner)
- Design and progress an evidence-based exercise program to optimise an individual's health and wellbeing that considers their impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)
- Competently assess breathing and provide safe and effective treatment for common cardiorespiratory impairments. (Clinical Practitioner)

Mastery register

Assessment Type ¹: Clinical performance evaluation

Indicative Time on Task ²: 10 hours

Due: **Week 14**

Weighting: **0%**

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

The mastery register for PHTY8100 is a list of key skills in which competence is considered to be a requirement for the assurance of quality physiotherapy practice for registration. You must demonstrate a minimum level of competence in these skills as a condition of passing this unit by achieving 60% completion of the mastery register in order to successfully complete the unit.

On successful completion you will be able to:

- Discuss the principles of exercise testing and a person-centred approach to exercise prescription including strategies to promote participation that considers an individual's impairments, goals and preferences, as well as their social, behavioural and cultural background. (Clinical Practitioner)
- Competently select, perform and interpret tests commonly used in physiotherapy practice to assess exercise capacity and cardiorespiratory fitness in individuals who are either active or sedentary as well as those with common health conditions. (Clinical Practitioner)
- Competently assess breathing and provide safe and effective treatment for common cardiorespiratory impairments. (Clinical Practitioner)

¹ If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the [Writing Centre](#) for academic skills support.

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Assumed knowledge

This unit assumes that you have comprehensive knowledge of anatomy and physiology.

Unit Organisation

This is a ten credit point unit run over a 13 week session. Overall, it is anticipated that you spend approximately 150 hours across the session on this unit. Within this session, there will be approximately 29 hours of campus-based learning activities, with a further 49 hours of online activities, including online interactive lectures and preparation for face-to-face tutorials. You will also need to allow approximately 72 hours for assessment based work.

Teaching and Learning Strategy

This unit encompasses an active learning approach where you will be expected to actively engage in enhancing your own learning experience. A blended learning and teaching strategy is implemented within this unit with online resources providing content and interactive activities such as quizzes and forums, which is further built upon in campus-based tutorials. You will be able to use tutorials to practice observation, assessment and prescription of programs to improve performance of everyday activities and breathing. The teaching approach will be based on you developing a deep understanding of principles and the ability to independently solve problems,

with the expectation that you can then translate this knowledge to different scenarios (e.g. patients with similar activity limitations but different diagnoses).

Attendance

In the Faculty of Medicine, Health & Human Sciences professionalism is a key capability embedded in all our programs. As part of developing professionalism, Faculty of Medicine, Health & Human Sciences students are expected to attend all face-to-face tutorials. You should be punctual and prepared for all sessions. All tutorials are scheduled in your individual timetable. The timetable for classes can be found on the University web site at:

<http://www.timetables.mq.edu.au/>. You may make a request to your unit convenor to attend a different tutorial on a one-off basis for extenuating circumstances. Failure to attend any learning and teaching activities, including workshops, may impact your final results. It is your responsibility to contact the unit convenors by email to inform tutors if you are going to be absent. **This unit involves essential on-campus learning activities which will be delivered in accordance with a COVID Safe plan. You are expected to attend campus for these activities unless the Public Health Orders and/or University advice changes, you have any symptoms of COVID or you have been identified as a contact of an individual with COVID.**

Textbooks & Readings

Essential

This unit does not have any textbooks that are essential for you to purchase.

Recommended

Recommended readings for this unit are accessible through Leganto.

The following text will be a useful resource and available in the library reserve and as an e-book. Recommendations about specific readings from these and other resources (such as research papers, books, websites and videos) will be listed on iLearn.

Main and Denehy (2016) *Cardiorespiratory Physiotherapy: Adults and Paediatrics* (5th Ed). Elsevier Health Sciences. The following exercise physiology text is strongly recommended, however if you have a similar text from previous studies that is fine. Copies will be held in library reserve and also available as an e-book.

Powers SK and Howley ET (2018) *Exercise physiology: Theory and application to Fitness and Performance* (10th Edition) New York: McGraw Hill

Technology and equipment

On-campus Teaching rooms are equipped with state of art audio-visual and ICT equipment including iPads, internet connection, high quality video cameras and multiple LCD screens. You will use a range of physiotherapy specific equipment typically used in the assessment and management of people with a range of health conditions.

Off-campus To study optimally when off campus you will need to have access to a reliable internet connection to retrieve unit information & at times to complete assessment tasks, including Quiz 1 and Quiz 2, via iLearn.

Consultation with staff

All staff will be available for individual consultation. See iLearn for contact details.

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies \(https://students.mq.edu.au/support/study/policies\)](https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central \(https://policies.mq.edu.au\)](https://policies.mq.edu.au) and use the [search tool](#).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/student-conduct>

Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) 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 or if you are a Global MBA student contact globalmba.support@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 help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

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

If you are a Global MBA student contact globalmba.support@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.

Changes from Previous Offering

In 2020, due to COVID-19, PHTY8100 was a special circumstance offering. Delivery of content and assessment had to be modified to optimise online teaching and learning. PHTY8100 in 2021 will revert back to the standard weekday attendance offering with all tutorials delivered face-to-face. There will be some online activities that will remain including interactive lectures.

Changes since First Published

Date	Description
13/07/2021	Updating COVID related advice for on-campus requirements