PHTY802

Foundations of Physiotherapy Practice

S2 Day 2019

Department of Health Professions

Contents

General Information	2
Learning Outcomes	3
General Assessment Information	3
Assessment Tasks	4
Delivery and Resources	8
Policies and Procedures	10
Graduate Capabilities	11
Changes from Previous Offering	17

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

Unit convenor and teaching staff

Unit Convenor
Joel Fuller
joel.fuller@mq.edu.au

Lecturer
Tim Foulcher
tim.foulcher@mq.edu.au

Tutor
Bridget Dean
bridget.dean@mqhealth.org.au

Taryn Jones
taryn.jones@mq.edu.au

Credit points
4

Prerequisites
Admission to DPT

Corequisites

Co-badged status

Unit description
This unit will provide a theoretical framework and foundation skills for physiotherapy practice. The unit will provide an overview of the scope of physiotherapy as a science- and evidenced-based health profession providing high quality person-centred health care within a biopsychosocial framework. The World Health Organisation's International Classification of Functioning, Disability and Health will underpin a model of clinical reasoning and the development of fundamental physiotherapy assessment and treatment skills. Students will also acquire foundation knowledge and skills in manual techniques, taping, and electrophysical agents.

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:

Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.

Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.

Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.

Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.

Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.

Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.

Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).

Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.

Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

General Assessment Information

Information concerning Macquarie University's assessment policy is available at http://mq.edu.au/policy/docs/assessment/policy_2016.html. Grade descriptors and other information concerning grading requirements are contained in Schedule 1 of the Macquarie University Assessment Policy.

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes and have attempted all assessment tasks.

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 a grading committee and are not the sole responsibility of the Unit Convenor.

Students will be awarded one of these grades 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.

Extensions for Assessment Tasks

Applications for assessment task extensions must be submitted via www.ask.mq.edu.au . For further details please refer to the Disruption to Studies Policy available at http://mq.edu.au/policy/docs/disruption_studies/policy.html

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% for the first day, and 5% for each subsequent day including the actual day on which the work is received up to a maximum of 50%. 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%

Assessment Tasks

Name	Weighting	Hurdle	Due
Pain Assignment	15%	No	Week 7
Mastery Skills	0%	Yes	Week 14
Clinical Simulation Exam	45%	No	Week 14/15/16
Written Examination 1	20%	No	Week 14/15/16
Written Examination 2	20%	No	Week 14/15/16

Pain Assignment

Due: **Week 7**
Weighting: **15%**

In this assignment, students will work in small groups using the clinical model of pain to interpret a case study and create a graphical representation of the factors involved in the patient's pain experience. Students will also complete an individual written component that identifies and explains the contributing neurobiological mechanisms.

On successful completion you will be able to:

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Mastery Skills

Due: **Week 14**
Weighting: **0%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

There are 10 PHTY802 mastery items related to the unit content – 5 items related to physiotherapy assessment and 5 items related to physiotherapy treatment. Each item is assessed within tutorials by the class tutor. Students are required to achieve 60% completion of the mastery skills within assessment and treatment modules (that is to achieve completion of 3/5 items for each module) in order to successfully complete the unit.

On successful completion you will be able to:

- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments

including prescription of bandaging, slings, taping and pressure therapy.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Clinical Simulation Exam

Due: **Week 14/15/16**
Weighting: **45%**

Students will demonstrate selected practical skills and clinical reasoning based on case scenarios.

On successful completion you will be able to:

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Written Examination 1

Due: **Week 14/15/16**
Weighting: **20%**

This 3 hour examination is an integrated examination for PHTY800, PHTY801 and PHTY802. The purpose of this approach is to help students to see how the content of the 3 units integrate together to achieve the broad aims of Semester A. The PHTY802 component is worth 20% and questions contributing to the PHTY802 component of the examination will be clearly labelled. The questions will test students' understanding of all content delivered in this unit of study. The focus of this exam will be the understanding and application of basic knowledge and principles.

On successful completion you will be able to:

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.

Written Examination 2

Due: **Week 14/15/16**
Weighting: **20%**

This 3 hour examination is also an integrated examination for PHTY800, PHTY801

and PHTY802. The purpose of this approach is to help students to see how the content of the 3 units integrate together to achieve the broad aims of Semester A. The PHTY802 component is worth 20% and the questions related to this component will be clearly labelled. This exam will test students' understanding of all content delivered in this unit of study. It will rely heavily on case studies and the application of knowledge to simple cases.

On successful completion you will be able to:

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.

Delivery and Resources

Unit Organisation

This is a four credit point unit run over a 13 week session. Each week there is a 1-hour lecture and two 2-hour tutorials. Further information is available via the PHTY802 iLearn site http://ilearn.mq.edu.au

Assumed knowledge

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

Teaching and Learning Strategy

This unit will have a 1-hour lecture and two 2-hour tutorials every week. Lectures will provide foundation knowledge and also use large group demonstrations and discussion, enabling students to use tutorial time efficiently to practice fundamental skills in assessment and management of patients. The teaching approach will be based on students developing a deep understanding of principles and the ability to independently solve problems, with the expectation that students can then translate this knowledge to different clinical scenarios (e.g. patients with similar impairments but different diagnoses).

Textbooks & Readings

Essential

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

Recommended

The following texts will be useful resources and are available in the library. Recommendations about specific readings from these and other resources (such as research papers, books, websites and videos) will be listed on iLearn.

- The Physiotherapist's Pocketbook: Essential Facts at Your Fingertips. 3rd Edition. Kenyon K and Kenyon J. 2009 Elsevier.
- Electrotherapy Explained: Principles and Practice. 4th Edition. Robertson V, Ward A, Low J and Reed A. 2006 Elsevier.
- Orthopedic Physical Examination. 6th Edition. Magee D. 2014 Elsevier.

Attendance

In the Faculty of Medicine and Health Sciences professionalism is a key capability embedded in all our programs. As part of developing professionalism, Faculty of Medicine and Health Sciences students are expected to attend all small group interactive sessions including tutorials, clinical and laboratory practical sessions. In most cases lectures are recorded; however, lecture recordings cannot be guaranteed and some discussion or content may not be available for viewing via the recording system.

All lectures and 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 tutor to attend a different tutorial on a one-off basis for extenuating circumstances.

Failure to attend any learning and teaching activities, including lectures and tutorials, may impact your final results. It is the responsibility of the student to contact their tutor or the unit convenor by email to inform tutors if they are going to be absent.

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. Students 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

Should you choose to work off campus you will need to have access to a reliable internet connection in order to retrieve unit information & at times to submit assessment tasks via iLearn.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). 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 *(**Note:** The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.)*

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

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/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/study/getting-started/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 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

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.

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

- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Assessment tasks

- Pain Assignment
- Mastery Skills
- Clinical Simulation Exam
- Written Examination 1
- Written Examination 2

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

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.
- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Assessment tasks

- Pain Assignment
- Mastery Skills
- Clinical Simulation Exam
- Written Examination 1
- Written Examination 2

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

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.

Assessment tasks

- Pain Assignment
- Mastery Skills
- Clinical Simulation Exam
- Written Examination 1
- Written Examination 2

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:

Learning outcomes

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.

Assessment tasks

- Pain Assignment
- Mastery Skills
- Clinical Simulation Exam
- Written Examination 1
- Written Examination 2

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

- Explain the contemporary scientific understanding and epidemiology of pain and other common impairments addressed by physiotherapists, including weakness and loss of range of motion that result from soft-tissue or bony injuries.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.

- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Describe the key principles and demonstrate skill in selecting and applying appropriate interventions to address different impairments, activity limitations and participation restrictions, including education and manual therapies.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Assessment tasks

- Pain Assignment
- Mastery Skills
- Clinical Simulation Exam
- Written Examination 1
- Written Examination 2

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

- Outline a model of biopsychosocial physiotherapy clinical reasoning based on The World Health Organization (WHO)'s, International Classification of Functioning, Disability and Health and explain how the model can facilitate physiotherapy assessment and treatment.
- Perform and interpret results from a standard physiotherapy assessment including the history and physical examination, including observation, movement testing and palpation.

- Demonstrate competency in the use of clinical tools commonly used in physiotherapy practice to measure impairment, activity limitation and participation restriction.
- Explain the rationale for use of electrophysical agents in physiotherapy practice, demonstrating an understanding of not only the physiological effects but also current evidence of efficacy.
- Demonstrate competency in the selection and application of electrophysical agents (including cryotherapy, heat, ultrasound and electrical stimulation).
- Demonstrate competency in the application of selected physiotherapy treatments including prescription of bandaging, slings, taping and pressure therapy.
- Collaborate with fellow students to facilitate skill development in assessment and treatment tasks.

Assessment tasks

- Pain Assignment
- Mastery Skills
- Clinical Simulation Exam
- Written Examination 1
- Written Examination 2

Changes from Previous Offering

The Pain Assignment was updated to include a group component that allows for better assessment of Unit Learning Outcome 9 ‘Collaborate with fellow students to facilitate skill development in assessment and treatment tasks’. Additionally, the requirement to create a graphical representation of the factors involved in a patient's pain experience was added to allow for a deeper assessment of students' understanding of the complexity of pain. An individual written component to the assignment has been retained to allow for early identification and intervention with students who have poor writing skills.