

World Physiotherapy Guidance document

GUIDANCE FOR DEVELOPING A CURRICULUM FOR PHYSIOTHERAPIST ENTRY LEVEL EDUCATION PROGRAMME

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1. Introduction

This guidance for developing a curriculum for a physiotherapist entry level programme has been prepared in response to requests from physiotherapist educators for more information on developing programmes. During the development of the Physiotherapist education framework [1], reviewers recommended development of a guidance document that would provide more details about entry level curriculum. In order to support the advancement and quality of physiotherapist education globally, in 2021 World Physiotherapy established a working group tasked with creating this document.

Curriculum design and development is a complex creative process that requires the participation of various stakeholders with a range of expertise, knowledge, and skills. It is usually initiated to respond to the local needs while at the same time following global trends and maintaining professional quality standards.

1.1 Purpose and objectives of this document

The purpose of this document is primarily to provide guidance for developing a curriculum for new physiotherapist entry level education programmes at a minimum, of a bachelor's level degree, and potentially the improvement/upgrade of existing programmes. This guidance document is aligned with the domains of physiotherapist practice competence as outlined in the Physiotherapist education framework [1] (Appendix 1).

The main objectives of this document are to provide guidance on:

- developing and designing a contemporary physiotherapist entry level curriculum that is philosophically, theoretically, and evidence based
- aligning the curriculum with the programme vision and mission
- selecting and developing the teaching, learning, and assessment strategies
- planning and carrying out programme evaluation related to learning outcomes, and required entry to practice threshold competence
- preparing the format and content of a curriculum that meets quality requirements set by World Physiotherapy.

Physiotherapist practice is continuously evolving, and this evolution should be reflected in the curriculum of entry level programmes. Therefore, in this document when the curriculum content is discussed, the emphasis is on *what* physiotherapists do and *why* they do it, rather than *how they do it*. For example, the clinical reasoning skills of an independent professional are highlighted, supporting the development of professional identity, ethos, and autonomy, rather than specific physiotherapy techniques.

It is envisaged this document is used as a guidance tool that is critically examined alongside the evidence of the needs, policies, and system characteristics of the specific context where the programme will be implemented. It is important to note that although this document provides more detailed guidance on process, content, and format, it is a flexible document that allows for adaptation and integration of diverse country/territory perspectives and situations/circumstances. Illustrative examples of physiotherapist entry level programmes from various parts of the world are used to provide guidance and inspiration. Examples illustrate the variability of programmes that are always contextualised, and do not represent World Physiotherapy endorsement of these programmes or the model that must be followed.

1.2 Structure of the document

This is a contemporary and forward looking document that provides guidance for curriculum development along with illustrative examples, tools, and tips. It includes three sections: introduction, a step-by-step guide for developing a physiotherapist entry level curriculum, and a curriculum template. The document is informed by the World Physiotherapy's policy statement on education [2], World Physiotherapy programme requirements for accreditation [3], and Physiotherapist education framework [1], including the domains of physiotherapist practice competence as outlined in the framework.

The document covers six necessary elements for the development of a high quality physiotherapist entry level programme, as described in the Physiotherapist education framework [1] (figure 1):



Figure 1: Six core elements

It answers fundamental questions along the four dimensions of the curriculum development framework [4]:

- a) The big picture decisions the why?
- b) Defining capabilities of graduates the what?
- c) Teaching, learning and assessment the how?
- d) Organisation the where?

The emphasis is on the first three questions, as the document is written under the assumption that the local needs for physiotherapist education are established. It also assumes that the higher education institution (HEI) that develops the programme is a recognised degree granting institution, and that it

has institutional infrastructure, policies, procedures, and personnel capable of designing, developing, and delivering the physiotherapist entry level education. Therefore, the primary focus of this document is on the programme foundations, curriculum, teaching, learning, and assessment, as well as the programme quality assurance. It briefly refers to the HEI infrastructure and culture, and academic staff, as those are covered in more detail in the Physiotherapist education framework [1]. It gives some suggestions on how to develop a physiotherapist entry level curriculum in countries/territories where there are few physiotherapists with advanced degrees to participate in the curriculum development.

1.3 Definitions

Different terminology is used in different countries/territories around the world. To avoid ambiguity in this document we use the terminology consistent with the <u>World Physiotherapy glossary</u> and provide the following more detailed definitions:

Competence is the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in practice or study situations and in professional and personal development.

Course is a unit of teaching and learning that covers an individual subject or subjects, with a schedule of sessions over one or more academic terms. After successful completion, students receive academic credit that is recognised towards the granting of an approved degree.

Curriculum is a document that presents a comprehensive plan for academic and practice components of the programme, including programme and course outcomes, content, teaching, learning and assessments methods.

Learning outcomes are the totality of information, knowledge, understanding, attitudes, values, skills, competencies, or behaviours an individual is expected to master upon successful completion of an education programme. They are written statements of the expected effect of learning experience in terms of students' knowledge, skills, and attributes that are specific, observable, and measurable. Learning outcomes can be defined at different levels including institutional, faculty, programme, course, and lesson level.

Programme outcomes are broader learning outcomes that students can obtain only after completing a series of courses in a programme, in which they deepen their knowledge and understanding and develop skills and attributes.

Course outcomes are learning outcomes achieved after completing a single course and defined in terms of knowledge, skills, and attributes.

Practice education includes educational experiences under the supervision of appropriately qualified physiotherapists in both clinical and non-clinical settings where physiotherapists practise away from the HEI.

Physiotherapist entry level education programme is a university or university level programme that equips individuals to meet the minimum standards (the entry to practice threshold) to practise as independent autonomous physiotherapists as described in World Physiotherapy Policy statement: Autonomy [5], and is independently recognised and/or accredited as being at a standard that affords graduates full statutory and professional recognition.

Physiotherapist entry level programmes can be at a Bachelor's degree (BSc PT) or Master's (MPT), or Doctorate (DPT) level; irrespective of the level of academic award, the level or standard of entry to the profession is similar. It is important to distinguish entry level physiotherapist degrees from research based Master's degrees (MSc) and doctoral degrees (PhD, DPhil, DSc, EdD).

Programme is a defined combination of courses and requirements leading to a degree granted as official recognition of its completion. It encompasses both curricular and non-curricular components.

Syllabus is a course document that outlines the details of the course (outcomes, content, methods, assessments, etc.).

2. Developing a physiotherapist entry level programme: focus on curriculum

This guide starts with the assumption that the big picture work related to defining the needs for the programme are already completed. This means that necessary resources are allocated, key players identified, curriculum committee working groups established, and the process is outlined in a clearly laid out curriculum development plan. HEIs that provide post-secondary education initiate the development of physiotherapist entry level programmes in collaboration with other stakeholders. It is of great importance that a curriculum for physiotherapists is developed by physiotherapists. The process must be led by qualified physiotherapists and driven by an assessment of needs that takes social, historical, political, economic, cultural, professional, research, and educational factors into consideration. The curriculum is based on a vision for the future of the profession, and its quality paradigm, that in turn shapes that future by preparing graduates to enter the physiotherapy workforce with specific knowledge, skills, and attributes.

This guide also assumes that the HEI is a recognised institution with organisational capacity to deliver the physiotherapist entry level programme. The HEI should have strategic intentions for education that clearly identify the HEI's graduate competence, attributes, and capabilities which are aligned with national qualification frameworks. As stated in the Physiotherapist education framework [1], designing a physiotherapist education programme is a dynamic, inclusive, future-oriented, and iterative process that takes time (Box 1).

Box 1: Programme design

The design of a professional qualification programme is a value-laden process in which decisions are made about the inclusion and exclusion of certain content, ideas, principles, or perspectives. It is a challenging task of imagining the unknown future based on the current knowledge. Critically examining the basis and assumptions on which these decisions are made should ensure that entry level programmes in physiotherapy have a solid philosophical, theoretical, and pedagogical foundation.

World Physiotherapy (2021, p. 24) Physiotherapist education framework [1]

A guidance for the development of a physiotherapist entry level programme is given in this section focusing on the processes, decisions, and outcomes.

2.1 Philosophical and theoretical foundations: The big picture decisions - the why?

Grounding the programme philosophically and theoretically is one of the initial steps that programme developers take. The curriculum decisions are based on philosophical and theoretical orientations that have implicit value structures and these orientations inform the curriculum development process. During this process considerations are given to the philosophy and epistemology of physiotherapy as a profession, its nature and essence, and how physiotherapy is conceptualised, understood, and defined in a specific context.

The curriculum prepares a physiotherapist to have an in-depth understanding that human body movement, health and rehabilitation sciences, quality of life, and disability are all complex human phenomena. The curriculum should be situated within a broader context such as human rights, Sustainable Development Goals (SDGs), climate crisis, public health, and health promotion. Models like the World Health Organization's International Classification of Functioning, Disability and Health (ICF) [6] are reflected in the curriculum. The curriculum needs to be connected to the social, economic, political, cultural, and historical contexts in which physiotherapists practise.

The curriculum also includes <u>epistemology</u> [7] and the epistemological questions about the nature of knowledge and the methods used to produce the scientific knowledge in physiotherapy. The answers to these questions inform the decisions related to the course content as well as teaching and learning experiences.

For example, epistemological knowledge of the nature of human movement means not only understanding the classical biomedical (disease, illness, and sickness) information, body functions, body structures, activities, and participation, but also incorporates understanding of the social and anthropological perspectives of the human movement system and its relationship with epistemological health studies. It also includes the theoretical foundations of the embodied cognition and pedagogy perspectives of human body movement.

Understanding the nature of knowledge and how it is created informs pedagogical and curricular decisions such as those related to teaching and learning experiences. Objectivism, behaviourism, cognitivism, constructivism, and connectivism underpin the learning theories that are the theoretical basis of teaching and learning in a programme [7]. Audette & Roush [8] in their commentary describe other theoretical perspectives that are relevant for professional education such as progressive education theory and critical pedagogy. Learning theories and theoretical perspectives shape the ways curricula are designed, how learning resources are developed and used in programmes, and how learning interactions and experiences are designed, implemented, and assessed. Whatever approach is taken, a curriculum should be based on a philosophy of education that is clearly articulated and aligned with the HEI's mission and vision, programme learning outcomes, and choice of teaching, learning, and assessment strategies to ensure the ultimate attainment of the expected level of graduate competence.

Tip. When working on the programme foundations it is useful to review the World Physiotherapy accreditation requirements [9] as they relate to philosophical, theoretical, and pedagogical grounding of the programme. See below for example. (Accreditation requirements are available upon request accreditation@world.physio)

Requirement 4: Academic programme

Element 4.1: Pedagogy

Criterion

The educational institution must provide evidence that the programme is based on philosophical pedagogy that facilitates attainment of graduate attributes through the progressive development and integration of knowledge, clinical skills, independent thinking, ethical and value analysis, communication skills, clinical reasoning, and decision-making.

Evidence is to be provided for each of the following indicators:

- The programme is structured to ensure that all the key areas of physiotherapy practice are core components of the programme.
- The teaching plan for each unit of instruction includes a range of teaching, learning, and assessment methods appropriate to the achievement of the specific learning outcomes for the unit and accommodates the learning styles of the students.
- The programme schedule includes adequate time for consolidation of student learning.

Understanding and identifying philosophical and theoretical foundations of the programme is essential for ensuring the quality of the programme. Programme foundations are usually defined through critical discourse about physiotherapy and pedagogical perspectives. Grounding the programme epistemologically, theoretically, and pedagogically in turn shapes the educational philosophy of the

programme and how it links to the broader mission and vision of the HEI and to the attainment of graduate competence.

To illustrate the critical examination of the philosophical and theoretical foundation of any new physiotherapist entry level programme, it is important to explain the philosophical and theoretical underpinning of this document and the approach used in its development. The outcome based, or competency based, education approach to curriculum development underpins the guidance document. Although slightly different, both approaches are based on determining learning outcomes that will guide decisions about curriculum and assessments. They are contemporary approaches adopted and widely used in medical and health professions education, including well established physiotherapy programmes in low, middle, and high income countries/territories. Both approaches are rooted in behaviourist psychology, including the work of educational psychologists such as Krathwol, Bloom, and Tyler, and experimental psychologists such as Watson, Pavlov, Thorndike, and Skinner.[10] In this document "outcome based education" is used to denote both.

It should be noted that although outcome based education has been around for over half a century and it is widely adopted by consensus, it still lacks robust evidence - particularly about its applicability to more complex aspects of clinical performance. [10, 11] It is reported that the outcome based approach has clarity, relevance, accountability, and flexibility. It also provides guidance for curriculum development and assessment. The outcome based approach has the potential for standardisation. However, the approach has been critiqued for its behaviourist roots and its failure to account for all types of learning, and the affective domain (attitudes, values, emotions). [10-12]

It is assumed that the approach to curriculum development presented in this document will be used in the light of evidence based recommendations. While the document provides guidance and examples that may contribute to the standardisation of attributes of physiotherapists, it highlights the need for individualisation and adaptations of the approach to the context in which the programme is developed. Integration, commitment to excellence, and nurturing professional ethos, values, and identity are other aspects to consider when aligning the key curriculum components.

The outcome based approach highlighted in this document is meaningful only if there is constructive alignment of learning outcomes, teaching and learning methods, and student assessment.

Constructive alignment is a constructivist outcome based approach that requires that teaching and learning methods are designed in a way that allows students to achieve learning outcomes and demonstrate competence that is assessed against a set of given standards to be achieved. [13, 14] It also requires clearly identified learning outcomes and assessment to demonstrate students' proficiency. Constructive alignment uses a systematic approach that allows for alignment at various levels ranging from a course and programme to departmental and institutional levels. This approach necessitates upfront investment of time and resources when curriculum is developed and teaching, learning, and assessment methods designed. Implementation of the constructive alignment also calls for institutional support and clearly defined institutional policies and procedures.

An example of the constructive alignment is an Integrated Curriculum Framework developed by the University of New South Wales in Australia. [15] The framework illustrates alignment between various components of the curriculum to ensure that their programmes educate competent graduates - including strategic intent and graduate capabilities, programme learning outcomes, course learning outcomes, courses and course components, assessment, and evaluation.

Tip. When developing a new physiotherapist entry level programme review the philosophical and theoretical Models of Physiotherapy, Body, and Movement in:

<u>Physiotherapy Theory and Practice Journal</u>, ISSN 09593985, 15325040, H Index 46, SJR Q2 Country: UK

Books

Physiotherapy Education: Academic Dialogues at the Universidad del Rosario, 1996-2016 by Lilia Virginia García (ed.), Editorial Universidad del Rosario

The Body and Social Theory by Chris Shilling, SAGE Publications, 2003

The Body & Society: Explorations in Social Theory by Bryan S Turner, SAGE Publications, 2008

2.1.1 The programme vision, mission, and objectives

Vision

Vision statements describe the programme's long term and high level goals and aspirations. Programme's vision statements closely align with the institutional vision, principles, and values (Example 1).

Mission

Although the definition of what a mission statement is varies, there is a general agreement that a mission statement is a concise overall statement of *what the programme unit is*, what *it does* and for *whom it does* it. The mission statement reflects the programme's values, principles, and broad intended objectives (Example 2).

The <u>University of Connecticut (USA) provides a guide to writing mission statements</u> that suggests a simple structure and a checklist. [16] Three components of the mission statement are highlighted: 1) primary functions of the programme, 2) purpose of the programme, and 3) stakeholders of the programme (groups that will participate in and benefit from the programme).

Objectives

The programme objectives are broad statements of the educational intent of the programme. Please note that terminology differs and some HEIs use aims, goals, or purposes for these broad statements of educational intent, and the examples in this document preserve the original terminology used by HEIs. The programme objectives are informed by the programme's philosophical and theoretical foundations (Example 3).

Once the philosophical and theoretical questions underpinning the physiotherapist programme and its pedagogy are answered, objectives, mission, and vision are defined, it is time to focus on the second dimension of the curriculum development - capabilities of graduates or *the what?* of the curriculum.

2.2 Curriculum: Defining capabilities of graduates - the what?

2.2.1 Physiotherapy and domains of physiotherapist practice competence

Physiotherapist entry level programmes prepare students for the current and future needs of clients as well as the developments of physiotherapist practice. They should reflect World Physiotherapy's policy statements on Description of physiotherapy [17] and Education [2]. The Physiotherapist education framework [1] describes eight domains of physiotherapist practice competence including: 1) physiotherapy assessment and intervention, 2) ethical and professional practice, 3) communication, 4) evidence-based practice, 5) interprofessional teamwork, 6) reflective practice and lifelong learning, 7) quality improvement, and 8) leadership and management. These documents offer guidance for standardisation of physiotherapy as a profession globally (Box 2).

Box 2: Professional standardisation

The first professional qualification, obtained in any country, should represent the completion of a programme that qualifies the person to use the professional title of 'physiotherapist' (or recognised title) and to practise as an independent professional. Physiotherapist entry level education programmes must be grounded in the nature and scope of physiotherapy and, at a minimum, should:

- 1. reflect the scope of physiotherapy, described in World Physiotherapy's policy statement:

 Description of physiotherapy, and the domains of competence of physiotherapist practice
- 2. ensure the graduate is competent to practise by requiring them to evidence that they have achieved specific knowledge, skills, and attitudes according to the entry to practice threshold competence
- 3. enable the graduate to meet professional standards consistent with World Physiotherapy guidelines
- 4. be delivered, at a minimum, through a bachelor's level degree with physiotherapy in its title; the programmes should be aligned with the appropriate education qualification frameworks in the given jurisdiction

World Physiotherapy (2021, p. 24) Physiotherapist education framework. [1]

Any graduate of a physiotherapist entry level programme must demonstrate the entry to practice threshold competence at the end of their education - regardless of the location where they study and practise. Although these documents are specific, they allow space for individualisation of the programme to reflect the uniqueness of the local needs for physiotherapy, description of physiotherapy, physiotherapist practice, and regulatory requirements.

Physiotherapist entry level education programmes are situated within a specific cultural, social, economic, political, and historical context; and characteristics of that context must be addressed in the curriculum. Programmes prepare graduates to meet the local/national qualification standards, professional regulatory and registration requirements, therefore, those requirements are taken into consideration when making the curricular decisions. For example, some countries/territories have defined physiotherapy and developed physiotherapist competency frameworks (Appendix 2). These provide a basis for definition of programme learning outcomes and the curriculum development in those countries/territories, as described in the Physiotherapist education framework [1].

The programmes are required to meet the quality standards as defined by the education programme accreditation bodies, such as national university programme's accreditation bodies or the World Physiotherapy accreditation service.

The programmes emphasise professionalism, that is defined as acting with integrity and respect, adhering to the principles of equity and diversity, demonstrating leadership within and outside the profession, and working towards the development of a physiotherapy identity that reflects these core values. They also include graduate capabilities such as developing professional practice in a framework of democracy, human rights, sustainable development and citizen participation; managing the provision of professional services according to the defined quality, efficiency, effectiveness, and safety of their professional interventions and the ethical, legal, responsible and profitable use of resources for which they are responsible; and providing educational experiences which (beyond developing skills or physical conditions) promote human development, health and bodily awareness regarding movement in different environments where human beings develop, individually and as part of groups.

In addition to graduates' attributes and capabilities related to the domains of physiotherapists practice competence, it is important to align them with national, regional, or international qualification frameworks. Given that physiotherapist entry level education must be delivered, at a minimum, through a bachelor's programme, the programme graduates must be able to demonstrate knowledge, skills, and attributes that are appropriate to that academic level, as defined by national and international standards.

Globally, the bachelor's degree is the most common physiotherapist entry level degree. The World Physiotherapy 2021 annual membership census shows that a bachelor's degree is the minimum qualification required to practise in 71% of countries/territories with member organisations. [18]

For example, the South African Qualification Authority provides guidance on Bachelor of Physiotherapy as a registered qualification within the National Qualification Framework. [19] Among other details it covers exit level outcomes as well as associated assessment criteria that are included in the university curriculum (Example 4).

2.2.2 Curriculum content

The curriculum content is dynamic and needs to change with the new and emerging evidence. Subject matter experts leading content delivery are responsible for maintaining their knowledge to ensure it reflects the best available evidence. Any gaps in expertise should be supplemented by clinical experts from practice. Knowing what to include and exclude in the programme content should be based on a sound critical review of the available evidence, acknowledging uncertainties and that updates will be required as new evidence emerges.

Tip. Decisions about the curriculum content must be based on evidence. Review examples of articles and books that cover the effectiveness of specific management approaches and modalities (Appendix 3) that should inform curricular decisions.

The content of the physiotherapist entry level programmes has been described in the Physiotherapist education framework [1] (Box 3). The framework provides general guidance to use a pragmatic approach to the development of context specific curriculum that is evidence-based and relevant for the local physiotherapist practice as well as the characteristics of the university programme including its length and level.

Box 3: Programme content

The physiotherapist professional curriculum includes content and learning experiences in:

- biological and physical sciences
 anatomy and cellular biology, histology, physiology, exercise physiology, exercise science, biomechanics, kinesiology, neuroscience, pathology, imaging, and pharmacology
- social/behavioural/technological sciences
 applied psychology, applied sociology, communication, ethics and values, equity, diversity and inclusion, management, design thinking, innovation, finance, teaching and learning, law, information communication technology (ICT), including laboratory or other practical experiences
- clinical sciences
 cardiovascular, pulmonary, endocrine, metabolic, gastrointestinal, genitourinary, integumentary
 (skin), musculoskeletal and neuromuscular systems, and the medical and surgical conditions
 frequently seen by physiotherapists. The theory which underpins physiotherapy should be
 applied to its practice and integrated with skills development and practice education experience.
 Clinical sciences should be applied across the lifespan to underpin physiotherapeutic

management, and to groupings of clients/conditions who may respond to physiotherapy interventions - for example, in fields of infectious diseases, oncology, HIV/AIDS and hospice and palliative care, mental health, burns, health promotion, global health etc.

- evidence based practice and research
 evidence based practice, types of data, literature search and review, research methodologies
 (qualitative, quantitative, and mixed methods), applied statistics, evaluation of literature and
 evaluation of research
- skills and characteristics of a competent physiotherapist
 critical thinking, clinical reasoning, ethical practice, professional behaviours, effective
 communication, effective team working, client-centred care, client assessment including use of
 outcome measures, interpretation of assessment findings and intervention planning, evidence based interventions (exercise therapy and physical activity, manual therapy, electro physical
 agents), digital practice, health promotion and prevention of disability, education
- practice education experiences
 all aspects of the client management model (from assessment and examination to diagnosis and prognosis), plan of care, interventions including treatment, education, prevention, health promotion and wellness programmes, leadership, management, and evaluation, in a range of settings where physiotherapists work. This may include but is not limited to: health institutions and clinics at primary, secondary and tertiary levels; industrial and occupational settings; schools; community; homes; and so on. Students should be able to practise in any of these settings.

World Physiotherapy (2021, pg. 29) Physiotherapist education framework. [1]

The physiotherapist professional curriculum also includes content and learning experiences that develop learners' capabilities such as having a flexible and open mind to learning new knowledge, being self-directed learners, and taking initiative in their learning.

The physiotherapy curriculum should reflect the physiotherapy skills and interventions required to meet the current needs of society and global health development. Courses could be grouped in different ways, but irrespective of the topic or course name used, the curriculum should focus on the role of physiotherapy management rather than medical management of different conditions. For examples see four year bachelor entry level programmes at the University of Queensland Australia [20], University of the Witwatersrand South Africa [21], and Universidad San Pablo Brazil. [22]

2.2.3 Learning outcomes

Clearly defined learning outcomes, at the programme and course levels, inform students and faculty about their intent, guide the selection of teaching, learning and assessment strategies, and are a basis for quality assurance. Outcomes are defined in terms of measurable and observable knowledge, skills, and attributes that students are expected to attain by the end of the programme or course.

Programme learning outcomes

Programme outcomes are broader learning outcomes that students can obtain only after completing a series of courses in which they deepen their knowledge and understanding, and develop skills and attributes. However, they must be sufficiently specific to clearly convey the programme intentions. There is no prescribed number of programme learning outcomes. Rather, when defining programme learning outcomes, it is important that these outcomes are in line with the university and programme vision and mission, consistent with the professional practice of physiotherapy, and use domains of physiotherapy practice competence or other physiotherapist competency frameworks to guide their definition. Clearly defined outcomes are one of the requirements for obtaining World Physiotherapy

accreditation. Programme outcomes are regularly monitored, evaluated, and adjusted and in this process input from graduates and other stakeholders is sought.

The programme outcomes are usually written as statements that start with *By the end of this programme, students will be able to* The end of the sentence is a specific, concrete, and observable knowledge, skill, or value that all successful students in the programme achieve (<u>Example 5</u>).

Below is the list of questions that could be asked when developing the programme learning outcomes that is adapted from Dyjur & Kalu's work on the curriculum review. [23]

- Do they convey the purpose of the programme?
- Do they convey what is important or unique about the programme?
- Do they outline the critical competencies, skills, and knowledge that students are expected to learn by the end of the programme?
- What does your HEI value about the programme? What is special or innovative about it? Are these values captured in the programme learning outcomes?
- What features should the programme have for it to be the most sought after of its kind in your country?
- Is anything missing?

Course learning outcomes

Course learning outcomes are statements of knowledge, skills, and attributes that students will be able to demonstrate at the end of a course. Achievement of course learning outcomes directly contributes to the achievement of programme learning outcomes.

2.2.4 Curriculum mapping

Curriculum mapping is a visual tool used to represent how courses in the programme interact, support students' progression through the programme, and achieve the programme learning outcomes. Curriculum mapping can be useful for analysis of various aspects of the curriculum, identification of the gaps, and examination of alignments, for example:

- alignment of the university and programme vision, mission, and outcomes
- alignment of the programme outcomes with the institutional graduate attributes and degree level expectations
- which courses contribute to the achievement of which programme outcomes
- level of expectation (introduction, reinforcement, understanding/introduced, reinforced, assessed) for each programme outcome achieved in each course
- teaching methods used in courses
- assessment methods used in courses
- resources and references to teach the course

There are a variety of curriculum maps used for various purposes, such as representing alignment of the programme learning outcomes with the institutional learning outcomes, or the curriculum maps of programme intended outcomes, courses, and assessments (see Example 6). Some universities have developed online curriculum mapping tools such as General curriculum mapping tool by Eberly Center at Carnegie Mellon University (USA) [24] or Curriculum Links

developed by Taylor Institute for Teaching and Learning at University of Calgary, Canada (more information can be obtained by directly contacting the Taylor Institute). [25]

2.2.5 Course syllabi

A course syllabus is a document that contains a course description with all relevant information including faculty name and contact information, course title and code, credit value, prerequisites, course objectives, learning outcomes, content, teaching and learning activities, assessment, and literature/reading list. Universities usually have a recommended syllabus format; for examples see the course syllabi templates from University of Jordan, Appendix 4 [26] and University of New England, US Appendix 5, [27] that also include information about university policies such as grading scale, accessibility for students with disabilities, attendance, or academic dishonesty.

2.2.6 Integrated curriculum

The previous section identified content and experiences that should be part of the curriculum. The contemporary approach calls for integration of fields of knowledge and content areas that are reflected in the way the curriculum is organised bringing together different aspects within broader areas of study. [28]

As discussed earlier, an integrated curriculum allows for alignment of the outcomes, teaching, learning, and assessment approaches with graduate and physiotherapist competences. Curriculum mapping is a useful tool for analysing some aspects of curriculum integration.

There are multiple ways to facilitate curriculum integration. An integrated curriculum can be viewed through the level of integration of:

- academic courses and practice education
- content and practical skills
- clinical and basic sciences
- the clinical reasoning process in all courses
- traditional content areas into learning units that cut across the curriculum.

For example, practice education is integrated throughout the programme and not left to be undertaken at the end of the programme. Another example of integration of content, clinical reasoning and practical skills is the use of cases that describe patients with multi-system needs, such as people living with cancer, HIV/AIDS, complex comorbidity long term conditions, and more recently the effects of Covid and post-Covid syndrome/long Covid. This approach prepares students for clinical decision making in complex cases and deciding when patients need referrals to advanced physiotherapy practitioners or other health professionals.

Various theoretical and practical approaches and themes are used to integrate learning outcomes across a curriculum. An example of an integrated physiotherapy programme is the one offered by Qatar University [29] that is organised around five structural themes: 1) movement science, 2) rehabilitation: exercise and function, 3) critical inquiry and innovation, 4) professional issues, practice, and perspective, 5) health: the lived experiences, and three integration themes including integration laboratory, practice education, and clinical reasoning and complexity.

Another example is the programme at <u>York St. John's University, UK</u> [30] where the content is organised as follows: 1) foundation of physiotherapy practice, 2) professional development, 3) exercise, rehabilitation, and health promotion, 4) specialism of physiotherapy, 5) research methods, 6) employability and service development, 7) advanced practice, and 8) professional practice placements, integrated into the curriculum throughout the programme.

The physiotherapist entry level programme at Universidad del Rosario, Colombia, is also an example of an integrated curriculum and how it is reflected in the way the curriculum is organised. [31] Their integrated curriculum is based on decisions about curriculum design, training domains and the learning outcomes (Example 7). A new programme determines courses according to its own decisions about the needs within the specific context, learning outcomes, curriculum components, and curriculum design. The integrated curriculum reflects the university's values, academic, scientific and professional culture, and graduate attributes.

Curriculum integration can be facilitated using different teaching approaches such as problem based learning or case based learning, to name a few. Another aspect of integrated curriculum is, for example, consistent and intentional application of the clinical reasoning process and promotion of an evidence-based approach in all courses across curriculum. The table below can be used as a tool in all courses.

Table 1:	Curricu	lum in	tegrat	ion 1	tool
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Identified patient problems	Evidence	Physiological causes	SMART goals of intervention	Evidence informed clinical intervention	Expected outcomes

An example of integration of clinical reasoning in courses is a consistent use of the Hypothesis Orientated Algorithm for Clinicians II (HOAC II). [32, 33] HOAC II is a conceptual, patient-centred framework for physiotherapists to use in evaluation and treatment planning for any patient. The framework integrates several approaches:

- it includes the five elements of patient management: examination, evaluation, diagnosis, prognosis, and intervention as advocated by the American Physical Therapy Association (APTA). [33, 34]
- getPTsmart.com uses the terminology of the International Classification of Functioning,
 Disability and Health (ICF) [6] and integrates it in the HOAC II clinical reasoning framework.

Tip. For discussion on how to reconcile movement science language with ICF that also includes the HOAC and guide to physiotherapist practice, review Deutsch, J. E., Gill-Body, K. M., & Schenkman, M. (2022). Updated Integrated Framework for Making Clinical Decisions across the Lifespan and Health Conditions. Physical therapy, pzab281. Advance online publication. https://doi.org/10.1093/ptj/pzab281 [35]

For an in-depth look at teaching and learning strategies, assessment, and technology and how educators facilitate development of clinical reasoning skills both in academic and clinical settings, see Musolino, G. M., & Jensen, G. M. (Eds.). (2019). *Clinical Reasoning and Decision Making in Physical Therapy: Facilitation, Assessment and Implementation*. SLACK Incorporated. [36]

2.2.7 Practice education

Practice education is an essential and fully integrated component of the physiotherapy curriculum. In the Physiotherapist education framework [1], and in this document, the term *practice education* is

used for educational experiences under the supervision of appropriately qualified physiotherapists in sites that are away from the HEI. The term practice education encompasses experiences in both clinical and non-clinical settings where physiotherapists practise.

Figure 2: Physiotherapist entry level education programmes



Practice education must be an integral part of the curriculum. During practice education students practise, under supervision, their assessment and treatment skills with diverse groups of patients and in diverse practice settings. Practice education is organised in a sequence and at the specific time in the programme when students have completed all prerequisite and preparatory courses. It could be integrated into courses or as a standalone course. [37] It enables students to progress through the programme from a novice to an entry level practitioner by integrating knowledge, skills, behaviours, and clinical reasoning. Practice education placements increase in complexity as students advance through the programme.

The curriculum includes an outline of a structured clinical education programme. The nature and focus of each placement can be flexible depending on the needs of physiotherapy service required of the country/territory. However, specific objectives and assessment criteria of each placement are made clear to students and practice educators involved in the specific placement. A standardised assessment tool should be used for evaluation of students' performance during each placement.

The length of practice education varies between programmes. The Physiotherapist education framework [1] and World Physiotherapy accreditation requirements state that practice education should be the equivalent of not less than one third of a curriculum. Given the variability in the length of the curriculum in different countries/territories, one third may translate into a different number of hours.

For example, Universidad del Rosario, Colombia, has from the total of 3,704 direct teaching hours of the physiotherapy curriculum and practice education is 1,512 hours, corresponding to 40.8% of that time. [31] At the University of the Witwatersrand, South Africa, students are required to complete a minimum of 1,000 mandatory supervised clinical hours out of the total of 1,260 hours (540 hours in 3rd year and 720 hours in 4th year of the programme. [38]

Many programmes offer 1,000-1,200 hours of practice education. Programmes may further determine a minimum of hours of practice that must be completed in clinical settings (eg 820 hours) versus non-clinical setting, or a minimum number of hours that each student must practise with a specific patient group (eg cardiovascular 100 hours). Determining the number of hours of practice education in a programme is context specific. It is related to the need of the programme to ensure that graduates are competent to enter practice and depends on the local regulatory framework and institutional requirements and regulations.

World Physiotherapy accreditation requirements provide further details on expected characteristics of clinical learning experiences for physiotherapist students (Box 4).

Box 4: World Physiotherapy accreditation requirements for clinical education

Requirement 5: Clinical education programme

Element 5.1: Clinical education

Criterion

The educational institution must provide evidence that the programme includes clinical education that has sufficient breadth, depth and comprehensive coverage to ensure that the learning outcomes of the programme are met.

Evidence is to be provided for each of the following indicators:

- Clinical education is sequential and integrated within the programme.
- Clinical education learning experiences should account for no less than one third of the curriculum and should maximise student learning.
- Students must have sufficient grounding in professional ethics prior to undertaking supervised clinical practice.
- Coverage of professional knowledge and skills within the programme are adequate for all students prior to beginning the first clinical placement.
- Clinical education includes progressive exposure to a variety of patients/clients with varying diagnoses and across the lifespan.
- Periods of supervised clinical practice are scheduled following relevant theoretical and practical education.
- The supervised clinical practice is scheduled following relevant theoretical and practical education.
- The supervised clinical practice experience provides opportunities for students to:
 - o integrate theoretical and practical concepts into clinical practice
 - o perform professional responsibilities under appropriate levels of supervision
 - o observe professional role models
 - receive timely and constructive feedback regarding their professional skills and clinical reasoning
 - o reflect on practice
 - progressively build and develop clinical and professional expertise.

World Physiotherapy accreditation requirements

The Physiotherapist education framework [1] provides guidelines on selection of appropriate practice education sites, establishment of contracts between HEI and clinical sites, monitoring of students' clinical learning and expected qualification of clinical educators (page 36-38).

Organisation of practice education is the sole responsibility of the HEI in collaboration with practice education facilities. To ensure that practice education has weight in the curriculum, practice education should be set up as courses so that students can be appropriately assessed, graded, and obtain credits for the relevant work completed. World Physiotherapy accreditation requirements related to clinical placements calls for diversity of experiences (Box 5).

Box 5: World Physiotherapy accreditation requirements of clinical placements

Element 5.2: Clinical placements

Criterion

The educational institution must provide evidence that the clinical education programme includes clinical placements that provide opportunities to develop competence in the key areas of physiotherapy, exposure to a range of settings (acute, rehabilitation and community) and to patients/clients of all ages. (Note: In the early stages of planning for a new programme in physiotherapy, the educational institution must ensure that adequate clinical placement experiences are available to the students who will enter the proposed programme.

World Physiotherapy accreditation requirements

HEI may prepare resource manuals for students and partners with all relevant details related to practice education. An example of such a manual is <u>Universidad del Rosario's Physiotherapy Programme Clinical Education Guidelines</u>. [39]

2.3 Teaching, learning, and assessment - the how?

Answering the "what" of the physiotherapists entry level curriculum leads to the next questions of *how*:

1) how to teach the curriculum to enable students' learning and acquiring competence required to enter the profession, and 2) how to assess learning with confidence that graduates of the programme meet the entry to practice threshold competence.

2.3.1 Teaching and learning

The decisions on how to teach the curriculum content should be based on the learning needs of students, learning outcomes to be achieved, needs of the subject matter, philosophical and theoretical foundations, and available evidence on effectiveness of those teaching and learning approaches. Teaching and learning methods must be geared to meet the learning needs of students as they progress through the programme. The Physiotherapist education framework [1] has identified several approaches to teaching and learning. Educators select the most appropriate methods and combine them as not a single method could meet the various requirements of the curriculum (figure 3).

Figure 3: Physiotherapist education framework approaches to teaching and learning

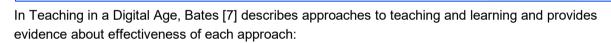
Physiotherapist education framework

Teaching, learning, and assessment

Teaching, learning, and assessment approaches are closely linked to the foundations and the content of the curriculum as they operationalise how learning outcomes are achieved. They should be aligned with the overall learning outcomes as well as informed by the contextual factors, professional values, and the vision for the future. Selected approaches should consider the local needs and assumptions about the context in which physiotherapy is practised; the role of clients; educational models; and learning activities and their sequence. Teaching and learning methods (Box 3) that most effectively enable the student to achieve the learning outcomes should be used. Decisions about teaching, learning, and assessment should be based on evidence on the best approaches that facilitate learning to become an independent professional.

Box 3. Examples of learning and teaching methods include:

lectures, seminars, tutorials, videos, podcasts, simulations, standardised patients, laboratories, virtual and augmented reality (VAR) sessions, structured clinical sessions, integrated sessions, structured site visits, discussions, personal development plans, problem-based learning, patient management problems, practice-based learning, competency-based learning, case study based learning, student-led learning, teambased learning, collaborative learning, self-directed learning, reflective journals and professional development portfolios, learning from experience, use of social media. These methods can be used either online or on campus.



- a) learning by listening: transmissive lectures
- b) learning by talking: interactive lectures, seminars, and tutorials
- c) <u>learning by doing: apprenticeship and experiential learning laboratory, problem-based learning, case-based learning, inquiry-based learning</u>
- d) learning by being: nurturing and social reform.

Students should be engaged in learning activities that foster development of their critical thinking and clinical reasoning skills. Such activities can include but not limited to:

Learning by talking

- · case discussion
- verbal of written assignment on presentation of assessment procedures, intervention, and hospital discharge planning

Learning by doing

- simulation based practical sessions
- interprofessional practical sessions
- simulated patient sessions which enhance development of clinical reasoning skills and clinical decision-making strategies
- flipped classroom

Tip. Great insights in the book <u>Educating Physical Therapists</u> by Jensen, Mostom, Hack, Nordstrom and Gwyer. [40]

Although general for all health professions, Melrose et at. in their book <u>Creative Clinical Teaching in the Health Professions</u> review some creative clinical teaching approaches for health professionals. [37] Since the pandemic started in 2020, teaching and learning online became a part of physiotherapist education programmes. While it is expected that post-pandemic learning will return to campus, use of technology in programmes will remain. Melrose et al. in their earlier book <u>Teaching Health Professionals Online</u> discuss frameworks and strategies for teaching health professionals in an online environment. [41] Both books are open access, downloadable from the <u>Athabasca University Press website</u>.

2.3.2 Assessment

Assessment is an essential part of outcome based education. It is based on the key characteristics of learning outcomes - those outcomes are observable and measurable. Assessment methods should be aligned with intended subject learning outcomes. By assessing the achievement of outcomes, it is decided whether the student has demonstrated a necessary level of competence. Each outcome should be assessed but not all outcomes could be assessed separately.

Assessment can be formative and summative, and both methods are combined. Assessment always aims to improve the performance by assessing it against a standard. The programme and individual courses should have a comprehensive, objective, transparent, and fair assessment strategy that includes a range of assessment methods appropriate to the outcome and student level. Assessment may range from written and practical examinations to portfolios and authentic continued assessment (figure 4). Clear assessment criteria and transparent marking scheme are essential to facilitate learning through assessment.

Figure 4: World Physiotherapy Physiotherapist education framework assessment methods

Box 4: Examples of assessment methods include:

written and practical examinations, competency-based assessment, verbal presentations, viva voce examinations, objective structured clinical exams (OSCE), dissertation, case history based projects, essays, programmatic assessments, self- and peer-assessment, portfolios, reflective writing, authentic continued assessment.

Tip. For ideas and examples of assessment methods check out <u>Effective Grading</u> by Barbara Walvoord and Virginia Johnson Anderson. [42]

In 1990 Miller published an article in which he described the hierarchy of clinical competence, also known as Miller's pyramid of clinical competence. [43] Since its publication the pyramid has been used as a framework for the assessment of clinical competence. The pyramid has four layers: knows, knows how, shows how, and does. Miller's pyramid has been adapted by adding a top layer representing professional identity formation. [44] Each layer can be assessed using a different assessment method:

- knows (knowledge) written test
- knows how (application of knowledge) clinical problem solving

- shows how (demonstration of skills) objective structured clinical exam (OSCE), standardised
 patients, clinical exams (see <u>Appendix 6</u>, the example illustrating clear descriptors of marking
 criteria for different component of an OSCE)
- does (performance) observations in clinical setting

Standardised assessments have been developed to assess clinical competencies of physiotherapists. An example of valid, standardised assessment is the <u>Assessment of Physiotherapy Practice</u> (APP) by Dalton, Davidson, and Keating (2011) developed with the support provided for the original work by the Australian Learning and Teaching Council, an initiative of the Australian Government. [45] In addition, the online APP and national database is available at <u>APPLinkUp</u> website that is used across Australia, New Zealand, Iceland, and Qatar. [46]

2.4 HEI infrastructure and culture - the where?

The Physiotherapist education framework [1] provides guidance on "the where" question. It describes infrastructure, policies, procedures, standards, and services that should be in place for an HEI to provide a physiotherapist entry level education programme. HEIs should be recognised and approved by an appropriate national authority as a degree granting institution. The institution should have a separate unit with 'physiotherapy' in its title that offers the physiotherapist entry level programme. The programme should have accountability mechanisms to both the HEI and the physiotherapy profession. It should have a system of academic awards and a course credit system that are clear and transparent, to facilitate the future mobility of its graduates. HEI should have a strong collaborative relationship with service providers who host the practice education component of the programme. For more details from the World Physiotherapy accreditation service see Box 6.

Box 6: World Physiotherapy accreditation expectations of education institutions

Requirement 1: The educational institution

Criterion

The educational institution must provide evidence that the structure of the educational institution is appropriate for the delivery of ap physiotherapist entry level programme.

Element 1.2: Programme and degree nomenclature

Criterion

The title of the programme and the title of the degree delineate the profession of physiotherapy,

Element 1.3: Duration of programme

The programme is of sufficient duration to provide adequate opportunity for the personal and professional development required for the entry level practice of physiotherapy.

Element 1.4: Policies

Criterion

The educational institution must provide evidence that it has in place appropriate policies for programme development, approval, delivery, assessment, evaluation, and review to ensure that standards of education are maintained.

Element 1.5: Procedures

Criterion

The educational institutions must provide evidence that it has in place appropriate procedures for programme development, approval, delivery, assessment, evaluation, and review to ensure the standards of education are maintained.

Element 1.6: Academic environment

Criterion

The educational institution must provide evidence that it provides a strong academic environment supportive of academic, students, and support staff.

Element 1.7: Research Environment

Criterion

The educational institution provides evidence that it fosters and explicitly supports research and scholarship in the physiotherapy programme.

World Physiotherapy accreditation requirements

2.5 Academic staff

The Physiotherapist education framework [1] highlights the requirement that a physiotherapist entry level education programme requires academic staff to be mainly composed of physiotherapists. It gives details of specific roles and responsibilities of academic staff. Curriculum development, learning design and delivery, and the evaluation of the programme, are the combined responsibilities of the core academic staff and the programme leader. The programme leader is a physiotherapist with an appropriate academic qualification and contemporary expertise in management, communication, and leadership.

It is recognised that it could be a challenge for a new physiotherapist education programme to ensure academic staff of qualified physiotherapists. This is a major challenge in countries/territories where physiotherapy has not been fully developed as a profession. While World Physiotherapy calls for a physiotherapy degree as a basic requirement for all academic staff, it is understood that certificate and diploma programmes were previously the entry level professional requirement for practice in some countries/territories. Therefore, individuals who possess such physiotherapy qualifications should not be precluded from academic staff positions. However, they should be able to demonstrate evidence of having a relevant graduate degree and advanced experience in physiotherapy.

In contexts where physiotherapy is in its early stages of development, this lack of physiotherapists with academic qualifications capable of developing and teaching the physiotherapist entry level curriculum represents a significant barrier. Institutions developing the programme could consider seeking advice, support, or mentorship from well-established programmes. In order to overcome these challenges HEIs should also prepare and commit to short, medium, and long term plans for the development of the programme academic staff. This involves ongoing on the job training as well as supporting academic staff to acquire appropriate graduate degrees that would enable them to teach the programme.

For more details on academic staff review World Physiotherapy accreditation requirement 2 (Box 7). It outlines criteria for the programme head, core academic staff, clinical education director/coordinator, clinical education site instructors, and associated academics.

Box 7: World Physiotherapy accreditation requirements for academics

Requirement 2: Academics

It outlines criteria for the programme head, core academic staff, clinical education director/coordinator, clinical education site instructors, and associated academics.

World Physiotherapy accreditation requirements

2.6 Quality assurance

When developing a physiotherapist entry level programme, it is important to consider from the very beginning how standards will be met, and quality of the programme maintained. Quality assurance is defined as a systematic, cyclical sequence of procedures in which each stage of the educational process is examined, reviewed, and reported on at regular intervals. The process should ensure that the educational outcomes are achieved, and experiences are satisfactory. The process should be sufficiently robust to assure students, the institution, and stakeholders that quality education is being provided. Internal and external processes are two main quality assurance aspects. In this document the focus is on internal quality assurance. Elements of the internal quality assurance are outlined in the Physiotherapist education framework, pg. 39 (figure 5). [1]

Figure 5 World Physiotherapy expectations of internal quality assurance

Internal quality assurance incorporates:



development and approval of the curriculum, including a panel of peers and experts assessing whether the curriculum meets requirements and standards



regular review and evaluation of each component of the programme (module/course/study-unit/paper)



regular review and evaluation of the programme as a whole



data analysis including student entry profiles, assessment results, student surveys, staff comments, placement staff perspectives, employer views regarding competency to practice



evaluation of data and subsequent action plan, taking a quality improvement approach

An internal quality assurance review usually takes place annually, and the reports generated, and the improvements subsequently made, then inform external accreditation events.

Development of a programme quality assurance plan is usually an essential part of the HEI quality assurance framework. It allows for the review of the programme and its curriculum from various perspectives by collecting data on key aspects from appropriate stakeholders. The programme leader is responsible for the development and implementation of the programme internal quality assurance plan. The continuing monitoring and evaluation of the programme determine to what extent outcomes are achieved, and what adjustments should be made. Quality assurance mechanisms could be built into many aspects of the programme and the curriculum. For example, see the syllabus template from the University of New England, US, which incorporates references to the specific external programme accreditation criteria. [27] Also review some of the tools used in the internal quality assurance process at the University of New England, Physical Therapy Program (Appendix 7) including Program assessment plan, Program assessment calendar and Program assessment results.

The maintenance of quality standards depends on policies and processes that ensure periodic reviews of the programme goals, content, relevance, and quality as outlined in World Physiotherapy accreditation service requirement 1 (Box 8).

Box 8: World Physiotherapy expectations of policies for quality assurance

Element 1.4: Policies

Criterion

The educational institution must provide evidence that it has in place appropriate policies for programme development, approval, delivery, assessment, evaluation, and review to ensure that standards of education are maintained.

Evidence is to be provided for each of the following indicators:

Clear and comprehensive policies exist on programme development.

Clear and comprehensive policies exist for periodic review of the programme goals content, relevance, and quality.

2.7 Conclusions

This document provides additional guidance for the implementation of the Physiotherapist education framework [1] in developing a contemporary physiotherapist entry level curriculum. It is expected that explanations and examples highlighted in this document can facilitate the development of high quality physiotherapist curricula globally. To achieve that, participation of physiotherapist educators in the curriculum development process is essential.

As both the profession of physiotherapy and professional education are evolving, this document will evolve too. Receiving feedback about its use is highly appreciated. Feedback and comments can be sent to info@world.physio.

3. Curriculum template

This template identifies the main components of the curriculum.

- Title page
 - The title of the programme and the title of the degree delineate the profession of physiotherapy
- Table of contents
- Programme philosophical and theoretical foundations
 - Physiotherapy
 - o Learning and pedagogy
- Vision and mission
- Programme objectives
- Programme learning outcomes
- Curriculum outline
 - Curriculum map
 - Courses (course syllabi should be in attachment)
 - o Teaching and learning (pedagogical) model
 - Assessment
- Course syllabi detailed course description (reflecting an alignment of learning outcomes content – teaching learning activities – assessment – reference list for each course included in the programme)
 - Course title
 - Credit value
 - Pre-requisites
 - Course objectives
 - Course learning outcomes
 - Syllabus content
 - Teaching and learning activities
 - Assessment with explanation of aims of various assessment components and the learning outcomes that are addressed
 - Literature list
- Practice education
 - Description of a structured practice education programme (see example below, please note that the duration of each placement may vary depending on the context

Year/Semester	Title of placement	Duration	Settings: Ward/OPD/community
	Introduction to MSK	2 weeks	
	MSK	6 weeks	
	Cardiopulmonary	6 weeks	
	Neuro-rehabilitation	6 weeks	
	Paediatrics	4 weeks	
	Integrated /community	4 weeks	
	Other placements relevant to the role of physiotherapists such as placements related to pelvic health, occupational health, public health, community health, sports, and other non-clinical settings	2-4 weeks each	

4. Examples

Example 1. Vision statements

Reprinted with permission of Universidad del Rosario, University of the Witwatersrand, and University of New England.

Universidad del Rosario, Colombia:

To be recognized nationally and internationally for its leadership and excellence in academic and research training, in coherence with its disciplinary framework and the needs of the environment, supported by the missionary principles of the Universidad del Rosario.

University of the Witwatersrand, South Africa:

The Department of Physiotherapy and its graduates are recognised for excellence in physiotherapy research, education and clinical skills that are locally responsive and internationally competitive.

University of New England, USA:

The Physical Therapy Program will be highly regarded for its innovative curriculum; diverse student body; international opportunities and initiatives; student and faculty scholarship; inclusivity of faculty, professional staff, and students in department life; community partnerships and engagement; and stewardship of its resources.

Example 2. Mission statements

Reprinted with permission of Universidad del Rosario and University of the Witwatersrand.

Universidad del Rosario, Colombia:

Integrally train university professionals in physiotherapy with solid ethical, humanistic, and scientific training, with the ability to appropriate and use knowledge with criteria and leadership for the benefit of the profession and society.

University of the Witwatersrand, South Africa:

The physiotherapy department is committed to developing the highest standards of academic, research and clinical proficiency. We graduate responsible, professional, innovative, critically thinking physiotherapists committed to meeting the health needs of all communities in South Africa, appropriately and cost effectively.

Research, evidence-based and contemporary teaching as well as community engagement are integral to our sustained excellence. We advance the physiotherapy profession through continual professional development with local and international collaboration.

Example 3. Programme objectives

Reprinted with permission of Universidad del Rosario and University of the Witwatersrand.

Universidad del Rosario, Colombia, Objectives of the Programme:

- To understand and apply the theoretical approaches around the human body movement as an object of study of physiotherapy, for the construction of capacities, liberties, and opportunities of the subject, in relation to himself and his world.
- To develop in the student analytical strategies of physiotherapeutic reasoning that allow professional decision-making about the condition of the corporal movement of subjects and groups, in the areas of professional profile.
- To participate in the formulation and development of research or Social engagement projects supported by the development of high-level thinking skills, in the framework of basic skills in research, to address issues in the areas of professional profile.
- To develop social management actions with a focus on health promotion and prevention of disability, as a basis for professional performance within the framework of responsibility and social participation of subjects and groups.
- To promote professional actions based on ethical, humanistic, and scientific values, expressed in interpersonal relationships, in an academic behaviour of excellence and in an evident attitude of leadership.

University of the Witwatersrand, South Africa, Programme Goals:

- 1. Integrate and apply fundamental theoretical knowledge
- 2. Critically assess and synthesize information to make an informed decision
- 3. Evaluate and respond appropriately to the health needs of all communities in South Africa
- 4. Complete an appropriate holistic assessment of a patient or client and interpret the findings
- 5. Develop an evidence-based management programme based on the assessment
- 6. Execute a holistic evidence-based management programme effectively
- 7. Communicate effectively with patient/clients, the inter-professional team, and other relevant stakeholders
- 8. Respond effectively using basic counselling skills in the context of physiotherapy
- 9. Demonstrate effective health promotion and education skills
- 10. Practice ethically and professionally when interacting with patient/clients and other relevant stakeholders
- 11. Observe the scope of practice, professional conduct, ethical rules, and relevant legislation
- 12. Apply appropriate management and administrative principles and skillset to physiotherapy practice
- 13. Inform, educate, and communicate about physiotherapy to the public
- 14. Learn the process of clinical research and critically appraise the literature to apply to professional practice (undergraduate programme)
- 15. Conduct and translate research of the profession through clinical practice and research (post graduate programme)

Example 4. Exit level outcomes and the associated assessment criteria

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University of the Witwatersrand, South Africa

1 Physiotherapy problem solving

1.1 Exit level outcome

The qualifying learner is competent to identify, assess and manage physiotherapy diagnoses and treatment strategies creatively and effectively through evidence-based strategies.

1.2 Associated assessment criteria

The qualifying learner will be able to:

- apply a multidimensional problem-solving model to the assessment of patients
- analyse information and make appropriate decisions about diagnoses, assessments, and treatments.

2 Application of Fundamental and Specialist Knowledge

2.1 Exit level outcome

The qualifying learner is competent to apply knowledge of basic, medical, and human sciences, as well as physiotherapy science, from fundamental principles to solve physiotherapeutic problems.

2.2 Associated assessment criteria

The qualifying learner can demonstrate the acquisition of a core of theoretical knowledge and is able to:

- compare the anatomy and/or physiology of normal and pathological organ systems
- describe the pathology, clinical presentation, course, and principles of evidence-based management of different medical conditions
- describe the role of the physiotherapist in the management of conditions and describe the role of other inter-professional team members
- describe indications, contra-indications, and therapeutic value of physiotherapy modalities
- select appropriate assessment techniques and outcome measures and describe their value in patient care
- establish a plan of treatment including short and long-term goals for the various conditions
- describe the psychological and sociological aspects of injury, disease, hospitalisation, loss of independence, loneliness etc.
- apply principles of physics and biomechanics to meet therapeutic techniques.
- describe the mechanics and safety of therapeutic equipment
- describe various healthcare models and their implementation in various settings
- demonstrate the use of technology in evidence-based inter-professional communication with colleagues, retrieval, and dissemination of information
- · appreciate inter-professional roles throughout practice

Example 5: Programme learning outcomes

Reprinted with permission of University of the Witwatersrand and University of New England.

University of the Witwatersrand, South Africa, Exit level outcomes

- 1. Physiotherapy problem solving: The qualifying learner is competent to identify, assess and manage physiotherapy diagnoses and treatment strategies creatively and effectively through evidence-based strategies.
- 2. Application of Fundamental and Specialist Knowledge: The qualifying learner is competent to apply knowledge of basic, medical, and human sciences, as well as physiotherapy science, from fundamental principles to solve physiotherapeutic problems.
- 3. Understanding the World as a Set of Related Systems by Recognising that Problem-Solving Contexts do not Exist in Isolation: In the context of the whole individual and his or her place in the family, society, the population, and the environment, at the end of the BSc (Physiotherapy) degree, the qualifying learner will have knowledge of health and its promotion, wellness across the lifespan, disease and its prevention, and rehabilitation and management.
- 4. Professional and General Communication: The qualifying learner is competent to communicate and teach effectively both orally and in writing with peers, colleagues, patients, appropriately targeted community groups, members of the inter-professional team and the public.
- 5. Research-Investigations, Exploration, Experiments and Data Analysis: The qualifying learner is competent to critically evaluate the professional literature, design appropriate research, analyse and evaluate data, contribute to the existing body of knowledge of the profession
- 6. Lifelong Learning: The qualifying learner is competent in and understands the requirements to maintain continued competence and to maintain current evidence- based expertise and techniques.
- 7. Team and Interdisciplinary Work: The qualifying learner is competent to work effectively as an individual, in teams and in multidisciplinary environments showing leadership and performing critical functions.
- 8. Professional Ethics and Practice: The qualifying learner is critically aware of the need to: act professionally and ethically and take responsibility within own limits of competence; act within the legal requirements of the profession and is competent to exercise judgement commensurate with knowledge and experience.

University of New England, US, Learning outcomes

After completing the DPT curriculum, students will:

- 1. Integrate concepts from the biological, physical, behavioural, and clinical sciences into physical therapy services
- 2. Exhibit professional conduct and behaviours that are consistent with the legal and ethical practice of physical therapy
- 3. Demonstrate compassion, caring, integrity, and respect for differences, values, and preferences in all interactions with patients/clients, family members, health care providers, students, other consumers, and payers
- 4. Demonstrate culturally sensitive verbal, nonverbal, and written communications that are effective, accurate, and timely
- 5. Collect and critically evaluate data and published literature to apply in the delivery of care, practice management, and to examine the theoretical and scientific basis for physical therapy

- 6. Screen patients/clients to determine if they are candidates for physical therapy services or if referral to, or consultation with, another health care professional or agency is warranted
- 7. Complete a patient/client examination/re-examination and evaluate and interpret the examination data to determine a physical therapy diagnosis and prognosis
- 8. Employ critical thinking, self-reflection, and evidence-based practice to make clinical decisions about physical therapy services
- 9. Collaborate with patients/clients, caregivers, and other health care providers to develop and implement an evidence-based plan of care that coordinates human and financial resources
- 10. Provide services and information related to health promotion, fitness, wellness, health risks, and disease prevention within the scope of physical therapy practice
- 11. Advocate for patient/client and profession
- 12. Provide consultative services and education to patients/clients, caregivers, health care workers, and the public using culturally sensitive methods that are adapted to the learning needs, content, and context
- 13. Employ effective leadership skills in the context of supervising, delegating, and mentoring within the profession

Example 6: Curriculum maps

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Hong Kong Polytechnic University, Relationship between institutional learning outcomes and program Intended learning outcomes.

	ı						
	Institutional L	earning O	utcomes for Grad	luates at Und	lergraduate	Degree L	.evel
Programme Intended Learning Outcomes	Competent Professional	Critical Thinker	Effective Communicato r	Innovative Problem Solver	Lifelong Learner	Ethical Leader	Socially Responsible Global Citizen
Professional/ Academic Knowledge and Skills	√	√	√	√	✓	✓	
Language Proficiency	~		✓				
Communication & Interpersonal Skills	~		~				
Problem-solving Ability	✓	✓		✓			
Personal and Professional Ethics	√					✓	~
Entrepreneurship, Leadership and Team-work	✓		✓	✓		✓	
Life-long Learning Attitude					✓		
Social and Civic Responsibility	√					✓	✓
Global Outlook	✓	✓		✓		✓	✓

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Hong Kong Polytechnic University, Curriculum map (programme intended learning outcomes, courses, and assessments)

Curriculum Map

This curriculum map gives a holistic view of the degree to which each intended learning outcome will be taught and assessed in BSc (Hons) in Physiotherapy programme of the Hong Kong Polytechnic University.

The following indicators (I, R, A) show the treatment of the programme intended learning outcomes in a subject:

I (Introduced) That the learning leading to the particular intended outcome is introduced in that subject.

R (Reinforced) That the learning leading to the particular intended outcome is reinforced/emphasized in that subject.

A (Assessed) That the performance which demonstrates the particular intended outcome is assessed in that subject.

	Programme Intended Learning Outcomes	De	Dever	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx	RSxxx
	Professional/academic knowledge & skills																																			
1	Appraise the health and social care needs of clients (individuals, groups and communities), including screening, prevention, and wellness programmes appropriate to physiotherapy		1	I A		1			I A	R A	R A	R A	I A	I A	R A	R A	R	R A	I R	I R	R A	R A	R A	R	I A	R A	R A	R A	I R A	I R A	R A	A	R A	R A	R A	R A
2	Practice physiotherapy safely and effectively		I R	I A		I A	ı	A	I A	1	R A	I R A	A	R A	R A	I R A	R A	R A	I R	I R	R A	R A	R A	R A	R A	R A	R A	R	I R A	I R A	R A	R A	R A	R A	R A	R A
3	Recognize his/her responsibility to deliver service and practice in accordance with current legislation applicable to physiotherapy and to maintain and promote the highest professional and ethical standard and to contribute to the development of the profession		1			1		R	1	1	R	R A	I A	I R A	R	R	R A	R A			R	R	R	R	I R A	R A	R A	R	I R	I R	R	R	R A	R A	R A	R A
4	Critically evaluate published research evidence on techniques / technology and apply relevant findings to physiotherapy practice, research and education		I R		R A	1		I R A	ı	R	R	I R A	ı		R A	R A	R	R	1	ı	R A	R A	R	R		R	R	R A	I R A	R A	R A	A	R	R	R	R
5	Demonstrate clinical decision-making skills including clinical reasoning, clinical judgment, and reflective practice to solve professional and clinical problems		I R A			1		I R A	I A	R	R	R A	I A		R A	R A	R A	R A	I R	I R	R A	R A	R A	R		R A	R A	R	R A	R A	R A	A	R	R A	R A	R A
6	Demonstrate a holistic approach to patient/client care (ie. patient/client- centered care) by drawing on the awareness of the global economic, cultural and sociological factors which may influence the context of physiotherapy practice.		1	I A	R	1			1	1	R A	R	I A		R A	R A	I A	R A	I R A	I R A		R A	R A	1		R A	R A	R	R	I R A	R A	R	R A	R A	R A	R A

Example 7: Integrated curriculum

Reprinted with permission of Universidad del Rosario.

Universidad del Rosario Integrated curriculum [31]

The following excerpt is from the Education project of the physiotherapy programme by Universidad del Rosario, p. 25.

The integrated curriculum demands a teaching model that recognizes the importance of relationships between forms of knowledge, attitudes, and life experiences, focused on the organisation of educational processes that transcend the linear view of the curriculum. This curricular proposal links different aspects of education, in an associative and meaningful way, from and to the object of study of the Programme, in an interdisciplinary and transdisciplinary perspective. It considers learning with a dynamic vision of a complex and interactive world. Additionally, the integrated curriculum promotes an educational model that offers a continuous movement of elements with diverse points of view, which enables to obtain relationship skills (communicative, cognitive, and procedural), in which spiritual, physical and affective interests and abilities are fed back, without specifying dominant hierarchies.

The following examples from the Education project of the physiotherapy programme by Universidad del Rosario, illustrate the curriculum integration at the university (macro) level. The university prescribes the curriculum macro-structure (pg. 26) consisting of two components: common core and disciplinary professional core.

Table 1. Curriculum Macro-Structure										
Comm Core	Credits		Disciplinary Professional Core	Credits						
Training Component Rosario	14		Training Component of Rehabilitation Clinic							
Training Component Sciences	31		Training Component of Physical Activity and Health							
Training Component	13		Training Component of Health and Work							
	Human Sciences	6	86		84					
Flexible or Elective Component	University Student'sDean ship	8		Training Component of Public Health and Social Management						
	Health Sciences	6	1	Training Component of Business						
	Deepening	8		Administration and Entrepreneurship						

The curriculum macro-structure is a basis for the physiotherapist curriculum. The curriculum enables students to achieve learning outcomes related to foundational knowledge (basic information) through the required courses in the common core, deepen their professional knowledge through the required disciplinary professional courses (complementary knowledge), and expand their world horizons through elective courses of the common core (knowledge for integral information), see Study plan (pg. 29).

		Table 2. Study Plan		
Nature of Assignements	Typology	Description	Number of Credits	Percentage
Knowledge of basic training or foundation	Required	They provide the students a structure of thought and the ability to think for thems elves, develop the concepts and fundamental categories of the sciences on which their professional practice or discipline is based.	58	34,1%
Complementary Knowledge of professionalization or deepening	Required	They provide conceptual, contextualization, methodological, practical, axiological and attitudinal elements for the labour performance of the graduate.	84	49,4%
Knowledge for integral formation	Elective	They are offered at the institutional level and give the students the option of broadening their world horizon, approaching the manifestations of culture and civilization and forming themselves as persons who are cultivated in sensitivity and admiration.	28	16,5%

The following table provides the details of the current physiotherapist entry-level curriculum at Universidad del Rosario, with the courses organized by the type of knowledge defined by the university framework.

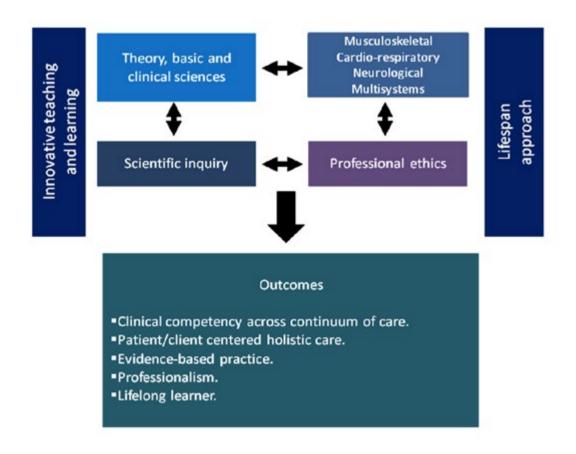
	Table 3. Current (Curriculum	
Type of	Subjects	Credits	Pre-requisites
Knowledge			
Basicformation	Biophysics	3	-
	Biology	3	-
	Biochemistry	2	-
	Biomechanics	3	Bi omechanical Principles
	Human Development and Society	2	-
	DisabilityandSociety	2	-
	Epidemiology in Rehabilitation	2	Logic and Game Theory
	Physiology of Physical Effort	2	Cardiopulmonaryfunction Biochemistry
	Cardiopulmonaryfunction	3	Diocricinistry -
	Foundations of Pathology	2	_
	Logic and Game Theory	2	-
	Morphophysiology	3	Biology
	Neurological rehabilitation	3	
	Biomechanical Principles	3	Biology Biophysics
	biomechanical Principles	3	Morphophysiology
	Development Psychology	2	-
	General Psychology	2	-
	Health and Work	2	-
	Theory of Measurement and Evaluation	2	Epidemiology in Rehabilitation
	Theories of Rehabilitation	2	
Camalamastası	Evaluation and Intervention of	2	-
Complementary knowledge		2	-
knowledge	Physical Fitness in Health	-	
	Physical Agents	3	
	Bi o-statistical Analysis	2	Theory of Measurement and Evaluation
	CardiopulmonaryClinic	3	-
	Neuromus cular Clinic	2	-
	Mus culoskeletal and	2	-
	Integumentary Tissue Clinic		
	Community and Health Education	2	-
	Development of Human Body Movement	2	-
	Performance of the	2	Health and Work
	Physiotherapist in Health and		
	Work Performance of the	2	
		2	-
	Physiotherapist in Promotion and Prevention		
	Thera peutic Exercise I	3	Evaluation of Human Body
	merapeutic exerciser	3	Evaluation of Human Body Movement
	Therapeutic Exercise II	4	Thera peutic Exercise I
	Evaluation of Human Body	4	Development of Human Body
	Movement		Movement
	Regulatory Framework in	2	-
	Physiotherapy Thorapoutic Massage	2	
	Thera peutic Massage		-

	Degree Option I	2	ResearchSeminar
	Degree Option II	2	Degree Option I
	Degree Final Project	0	-
	Orthotics and Prostheses	2	Neuromuscular Clinic
			Musculoskeletal and
			Integumentary Tissue Clinic
	Clinical education programme in	4	Principles of Exercise
	Physical Activity and Sports		Prescription
			-Physical Agents
	Clinical education programme	4	-
	inHealth and Work		
	Clinical education programme in	8	Thera peutic Exercise II
	Adults		
	Clinical education programme in	8	Thera peutic Exercise II
	Paediatrics		
	Clinical education programme in	5	Performance of the
	Promotion and Prevention		Physiotherapist in Promotion
			and Prevention
	Physiotherapeutic Reasoning	2	-
	Principles of Exercise Prescription	2	Physiology of Physical Effort
	ResearchSeminar	2	Bio-statistical Analysis
	Systems in Rehabilitation	2	-
	Sociology of Physiotherapy	1	-
	Body Expression Workshop	1	-
	Manual Therapy	1	-
Knowledge for	Deepening clinical education	4	-
integral formation	programme		
	Deepening subject I	2	
	Deepening subject II	2	-
	Elective subjects	20	
	Subject of Universidad del	2	
	Rosario		
	Deep ReadingSkills	2	-
	Communicative Skills	2	-
	Di alectical Skills	2	-
	Critical Competence	2	-
	Ethics	2	-
	Political Constitution and Civic	2	-
	Instruction		

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A graphic representation of an integrated curricular framework

The curricular framework for the MPT programme at Hong Kong Polytechnic University.[47]



Physiotherapist education framework. London, UK: World Physiotherapy; 2021.

It is recognised, and understood, that physiotherapist competencies may be described in other ways in different countries, reflecting the context in which it is practised.

DOMAIN	Physiotherapists who meet World Physiotherapy expectations can:					
Physiotherapy assessment and intervention	1.1 plan and conduct a structured, comprehensive client-centred assessment and physiotherapy examination of the client, or needs of a client group, including socio-economic, personal, and environmental factors, and screening for differential diagnosis					
	evaluate the findings from the assessment/examination to identify and prioritise client problems and negotiate achievable and measurable functional and clinical outcomes					
	1.3 formulate a diagnosis to guide physiotherapists in determining the prognosis and most appropriate, evidence-based intervention/education strategies for clients by using clinical reasoning, that results in identification of existing or potential impairments, activity limitations, participation restrictions, environmental influences, or abilities/disabilities					
	1.4 establish client-centred goals and develop an individualised plan of evidence-based intervention using a context specific, active, functional rehabilitation approach in full collaboration with the client/carers					

- 1.5 safely and effectively implement physiotherapy interventions, making appropriate use of technologies to restore integrity of body systems essential to movement; to maximise function and recuperation; to minimise incapacity; and to enhance quality of life, physical and mental health, wellbeing, independent living and workability in individuals and groups with altered movement behaviours resulting from impairments, activity limitations, participatory restrictions, or disabilities through:
 - therapeutic exercise
 - functional training in self-care and home management
 - functional training work, community, and leisure
 - manual therapy techniques (including mobilisation/manipulation)
 - prescription, application, and, as appropriate, fabrication of devices and equipment (assistive, adaptive, orthotic, protective, supportive, and prosthetic)
 - airway clearance techniques
 - integumentary repair and protection techniques
 - electrotherapeutic modalities
 - physical agents and mechanical modalities
 - client-related instruction
 - health promotion and prevention of impairments, activity limitations, participatory restrictions, and disabilities in individuals at risk of altered movement behaviours due to health, socioeconomic, environmental, and lifestyle factors
 - modifying environmental, home and work access, and barriers to ensure full participation in one's societal roles
- 1.6 regularly monitor, measure, record, and evaluate the outcomes of intervention using valid and reliable measures and, if necessary, make modifications to the planned intervention
- 1.7 judge the need for referral or discharge if the diagnostic process reveals findings that are not within the scope of the physiotherapist's knowledge, experience, or expertise; refer the client to another appropriate practitioner and facilitate transition from physiotherapy to the care of another professional; or discharge, securing optimal social participation for the client

1.8 deliver services in the most appropriate and safe setting (for example, clinic, community, home, school); via the most appropriate mode (for example, in person or digitally); considering the circumstances (for example, socio-economic status, family situation) and potential systemic barriers (for example, disability, gender, age, race, ethnicity, geographic location); and including whether a direct physical examination is required, and whether a client is able to receive care in a specific setting, or remotely

2. Ethical and professional practice

- 2.1 comply with the laws and regulations governing the practice of physiotherapy as an autonomous profession, and the relevant statutory, ethical, and professional codes, standards, guidelines and policies of their professional associations and regulatory bodies in the country in which they practise; and to report any observed unethical behaviours/practice by others this includes digital practice, digital data protection and the use of social media
- 2.2 practise using a culturally-competent, person-centred approach with respect for all forms of inclusion, diversity, dignity, privacy, autonomy, and human rights of the client, or legal guardian, who is seeking services regardless of whether the services are provided in person or remotely
- 2.3 practise within their own scope of practice; provide honest, competent, and accountable professional services; and recognise the limitations of their own competence and ensure to work within it; refuse to work outside of their own competence, if requested to do so; and to accept responsibility for the exercise of sound professional judgement
- 2.4 place the needs and interests of the client at the centre of their practice; provide fair, equitable, inclusive, and empowering quality services and ensure their own needs and interests as a physiotherapist do not compromise practice; charge and receive a just and fair level of remuneration for their services
- 2.5 obtain informed consent prior to intervention and respect the right of the client to refuse intervention
- 2.6 recognise clinical and environmental risk, manage risk responsibly and effectively, and advocate for the right of physiotherapists to work in a safe and healthy practice environment that assures their own health and safety as well as that of their clients

2.7 advocate for improved societal health and wellness of individuals, the public, and society, emphasising the importance of physical activity and exercise and the facilitation of such activities, and for the inclusion of both the client's and physiotherapist's perspective in decision-making 2.8 engage actively in anti-corruption, global health, and human rightsbased approaches 3. Communication 3.1 communicate clearly, accurately, understandably, effectively in a culturally-competent manner to create trust and an appropriate environment for physiotherapy intervention, empowerment, and collaboration to enable good outcomes, both in person and when working remotely 3.2 maintain accurate, clear, and timely records of assessment, decision-making, interventions, and outcomes and share with other professionals as appropriate; coordinate communication and documentation in line with legal, national, and local requirements for record keeping 3.3 provide accurate and appropriate information about physiotherapy to clients, to other agencies and to the community 3.4 demonstrate reflective listening and negotiating skills to develop trust and to enhance relationships and outcomes with patients, clients, and other colleagues, adjusting approaches as required to meet the situation 4. Evidence-based 4.1 apply a critical understanding of the research literature and use the best available evidence and new knowledge to inform and adapt practice practice to ensure it is safe and effective 4.2 identify clear, focused questions arising from practice that may serve as stimuli for future research 4.3 contribute to professional practice through research according to recognised standards and ethical practices, and research dissemination, appreciating the inter-dependence of practice, research, and education within the profession

5. Interprofessional 5.1 engage in respectful, collaborative practice within multidisciplinary teamwork and interprofessional teams to optimise measurable clinical outcomes and to promote a positive, individualised, client experience through the whole health and social care pathway; work within, and beyond, traditional professional boundaries (for example, skill sharing); collaborate with other health professionals and key stakeholders 5.2 work collaboratively with other members of multidisciplinary and interprofessional teams, and with clients, families, and caregivers to determine needs and to formulate goals for physiotherapy intervention 5.3 teach and mentor colleagues 6. Reflective practice 6.1 identify individual learning needs by assessing one's own practice and lifelong against peers and benchmarks, and set realistic learning goals learning 6.2 construct and implement a personal development plan and engage in continuing professional development 6.3 reflect on practice and seek support where needed to improve and develop one's own personal and professional efficacy and effectiveness 6.4 identify learning needs related to the use of technology in physiotherapy including new diagnostic, intervention, communication, and documentation tools addressing privacy, security, data storage, technology troubleshooting, and adverse events management 7. Quality 7.1 participate in organisational data collection, interpretation, and improvement analysis to measure quantity and quality of outputs 7.2 engage with, and initiate, service improvement initiatives, including acting on feedback from clients 7.3 utilise resources and technology efficiently to ensure their maximal impact on services 8. Leadership and 8.1 lead effectively and be led by others, as appropriate, and proactively model best professional values, and ethical behaviours management

- 8.2 manage the complexity of working autonomously, within professional competence and scope, and be responsive to organisational management structures in a dynamic healthcare environment
- 8.3 interact with administrative and governance structures to inform, develop, and/or implement appropriate health policies and strategies, and contribute to the planning and development of services which address the health needs of individuals and the community
- 8.4 provide for the ongoing growth and development of the profession and for the identification of the unique contribution of physiotherapy and its evolving scope of practice
- 8.5 develop strategies to manage ambiguity, uncertainty, change, and stress to develop resilience and to manage physical, emotional, and mental wellbeing

Physiotherapist education framework. London, UK: World Physiotherapy; 2021.

In the table below domains of physiotherapist competence are mapped out on various competence frameworks adopted by member organisations.

World Physiotherapy Description	Expected minimum competencies for an entry level physiotherapist in the European region [48]	Competency profile for physiotherapist in Canada [49]	Professional profile and competences of physiotherapist in Colombia [50]	Physiotherapy practice thresholds in Australia and Aotearoa New Zealand [51]
Physiotherapy assessment and intervention	General competences: assessment diagnostic, intervention competences, health promotion and prevention competences	Physiotherapy expertise	Professional reasoning, all competences are related to clinical practice, physical activity and sports, health and work, education, public health, and social management	Physiotherapy practitioner
Ethical and professional practice	Professional and interprofessional competences	Professionalism	Professionalism and ethics. Professional reasoning	Professional and ethical practitioner
Communication		Communication	Communication	Communicator
Evidence-based practice	Research and evidence-based competences	Scholarship	Evidence-based practice and research	
Interprofessional practice	Professional and interprofessional competences	Collaboration	Professional reasoning, all competences are related to clinical practice, physical activity and sports, health and work, education, public health, and social management	Collaborative practitioner
Reflective practice and continuing professional development	Education and learning competences		Professionalism and ethics	Reflective practitioner and self-directed learner
Quality improvement			Administration and management	
Leadership and management	Management competences	Leadership management	Administration and management	Manager/leader

World Physiotherapy Guidance for developing a curriculum for physiotherapist entry level education programme

	Education and learning competences		Educator	

Recognising that evidence is continuously evolving, members of World Physiotherapy subgroups suggested the following examples of evidence on effectiveness of specific management approaches and modalities that inform curricular decisions:

- 1. Boden, I., et al., *Preoperative physiotherapy for the prevention of respiratory complications after upper abdominal surgery: pragmatic, double blinded, multicentre randomised controlled trial.* bmj, 2018. **360**.
- Campbell, K.L., et al., Exercise Recommendation for People With Bone Metastases: Expert Consensus for Health Care Providers and Exercise Professionals. JCO Oncology Practice, 2021: p. OP. 21.00454.
- 3. Connolly, B., et al., *Physical rehabilitation interventions for adult patients during critical illness:* an overview of systematic reviews. Thorax, 2016. **71**(10): p. 881-890.
- de Hora, N., L. Larkin, and A. Connell, Is group-based or individual-based intervention more effective for quality of life outcomes in children with developmental coordination disorder? A systematic review. Physical & Occupational Therapy In Pediatrics, 2019. 39(4): p. 353-372.
- 5. Hallgren, M., et al., Associations of exercise frequency and cardiorespiratory fitness with symptoms of depression and anxiety-a cross-sectional study of 36,595 adults. Mental Health and Physical Activity, 2020. **19**: p. 100351.
- 6. Lin, I., et al., What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review. British journal of sports medicine, 2020. **54**(2): p. 79-86.
- 7. McCarthy, B., et al., *Pulmonary rehabilitation for chronic obstructive pulmonary disease*. Cochrane database of systematic reviews, 2015(2).
- 8. Preston, N., et al., A systematic review of high quality randomized controlled trials investigating motor skill programmes for children with developmental coordination disorder. Clinical rehabilitation, 2017. **31**(7): p. 857-870.
- 9. Schwank, A., et al., 2022 Bern Consensus Statement on Shoulder Injury Prevention, Rehabilitation, and Return to Sport for Athletes at All Participation Levels. Journal of Orthopaedic & Sports Physical Therapy, 2022. **52**(1): p. 11-28.
- 10. Stout, N.L., et al., A systematic review of rehabilitation and exercise recommendations in oncology guidelines. CA: a cancer journal for clinicians, 2021. **71**(2): p. 149-175.
- 11. Wilson, L.M., L. Morrison, and K.A. Robinson, *Airway clearance techniques for cystic fibrosis:* an overview of Cochrane systematic reviews. Cochrane Database of Systematic Reviews, 2019(1).

Textbooks listed below include evidence as well as foundations and principles of practice:

- 12. Petty, N.J. and K. Barnard, *Principles of musculoskeletal treatment and management e-book: a handbook for therapists*. 2017: Elsevier Health Sciences.
- 13. Petty, N.J. and D. Ryder, *Musculoskeletal Examination and Assessment E-Book: A Handbook for Therapists*. 2017: Elsevier Health Sciences.
- 14. Probst, M. and L.H. Skjaerven, *Physiotherapy in mental health and psychiatry: a scientific and clinical based approach.* 2017: Elsevier Health Sciences.

- 15. Brukner, P. and K. Khan, *Brukner & Khan's clinical sports medicine: Volume 1 Injuries. North Ryde*. 2017, NSW McGraw-Hill Education Australia.
- 16. Brukner, P. and K. Khan, *Brukner & Khan's Clinical Sports Medicine: The Medicine of Exercise, Volume 2.* 5th ed. 2019: McGraw Hill.

World Physiotherapy acknowledges the contribution of World Physiotherapy subgroups in compiling this list.

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University of Jordan Course syllabus template



Course Syllabus

1	Course title	
2	Course number	
3	Credit hours	
3	Contact hours (theory, practical)	·
4	Prerequisites/corequisites	
5	Program title	
6	Program code	
7	Awarding institution	
8	School	
9	Department	
10	Course level	
11	Year of study and semester (s)	
12	Other department (s) involved in	
12	teaching the course	
13	Main teaching language	
14	Delivery method	□Face to face learning □Blended □Fully online
1.5		□Moodle □Microsoft Teams □Skype □Zoom
15	Online platforms(s)	□Others
16	Issuing/Revision Date	
Cou	rse Coordinator:	
Nan	ne:	Contact hours:
Offi	ce number:	Phone number:
Ema	ail:	

18 Other instructors:

17

Name:
Office number:
Phone number:
Email:
Contact hours:
Name:
Office number:
Phone number:
Email:
Contact hours:

19 Course Description:

As stated in the approved study plan.

20 Course aims and outcomes:

A- Aims:

B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

	SLO (1)	SLO (2)	SLO (3)	SLO (4)
SLOs				
SLOs of the				
course				
1				
2				
3				
4				
5				
6				

21. Topic Outline and Schedule:

Week	Lecture	Торіс	Student Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
	1.1							
1	1.2							
	1.3							

2 2.2							2.1	
2.3 3.1 3 3.2 3.3 4 4.1 4 4.2 4.3								
3.1 3.2 3.3 3.2 3.3 3.2 3.3 3.2 3.3 3.2 3.3 3.2 3.3 3.2 3.3 3.2 3.3								2
3 3.2								
3.3 4.1 4.2 4.3								2
Week								3
A								
Week Lecture Topic Student Learning Outcome Methods (Face to Face/Blended/Fully Online) Face/Blended/Fully Online) Evaluation Methods Res								
Week Lecture Topic Student Learning Outcome Fully Online Platform Asynchronous Evaluation Res								4
Week Lecture Topic Learning Outcome Methods (Face to Face/Blended/Fully Online) Asynchronous Lecturing Evaluation Methods Res 5 5.1 5.2 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.3 5.4 5.4 5.4 5.4 5.4 5.5 5			77		G. 1		4.3	
5 5.2 5.3 6.1 6 6.2 6.3 7.1 7 7.2 7.3 8.1 8 8.2 8.3 9.1 9 9.2 9.3 10.1 10 10.2 10.3 11.1 11 11.2 11.3 12.1	Resources	Asynchronous	Platform	Methods (Face to Face/Blended/	Learning	Topic	Lecture	Week
5.3 6.1 6.2 6.3 7.1 7.2 7.3 8.1 8.2 8.3 9.1 9.2 9.3 10.1 10.2 10.3 11.1 11.2 11.3 12.1							5.1	
6.1 6.2 6.3 7.1 7 7.2 7.3 8.1 8 8.2 8.3 9.1 9 9.2 9.3 10.1 10 10.2 10.3 11.1 11 11.2 11.3 12.1							5.2	5
6 6.2 6.3 7.1 7.1 7.2 7.3 8.1 8 8.2 8.3 9.1 9 9.2 9.3 10.1 10.2 10.3 11.1 11.2 11.3 12.1							5.3	
6.3 7.1 7.2 7.3 8.1 8.2 8.3 9.1 9.2 9.3 10.1 10.2 10.3 11.1 11.2 11.3 12.1							6.1	
7.1 7.2 7.3 8.1 8 8.2 8.3 9.1 9 9.2 9.3 10.1 10.2 10.3 11.1 11 11.2 11.3 12.1							6.2	6
7 7.2 7.3 8.1 8 8.2 8.3 9.1 9 9.2 9.3 10.1 10.2 10.3 11.1 11.2 11.3 12.1							6.3	
7.3 8.1 8 8.2 8.3 9 9.1 9 9.2 9.3 10.1 10.2 10.3 11.1 11.1 11.2 11.3 12.1							7.1	
8 8.1 8.2 8.3 9 9.1 9.2 9.3 10.1 10.2 10.3 11.1 11 11.2 11.3 12.1							7.2	7
8 8.2 8.3 9 9.1 9 9.2 9.3 10.1 10 10.2 10.3 11.1 11 11.2 11.3 12.1							7.3	
8.3 9.1 9.2 9.3 10.1 10 10.2 11.1 11 11.2 11.3 12.1							8.1	
9 9.1 9.2 9.3 10.1 10.2 10.3 11.1 11 11.2 11.3 12.1							8.2	8
9 9.2 9.3 10.1 10.2 10.3 11.1 11 11.2 11.3 12.1							8.3	
9.3 10.1 10.2 10.3 11.1 11.2 11.3 12.1							9.1	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							9.2	9
10 10.2 10.3 11.1 11 11.2 11.3 12.1							9.3	
10 10.3 11.1 11.2 11.3 12.1 12.1 12.1							10.1	
10.3 11.1 11 11.2 11.3 12.1							10.2	10
11 11.2 11.3 12.1 12.1							10.3	10
11.3 12.1							11.1	
12.1							11.2	11
							11.3	
							12.2	12
12.3							12.3	
13.1							13.1	
13 13.2							13.2	13
13.3							13.3	
14.1							14.1	
14 14.2							14.2	14
14.3							14.3	
15.1								1 5
15 15.2							15.2	13

15.3					
	•		·		
22 Evaluation Meth					
Opportunities to demons		ement of the SLO	Os are provided	through the following	ng assessmei
methods and requiremen	1		GI O	1	
Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
-					
22 C P :					
23 Course Requirer					• 0•
(e.g: students should ha	_	ter, internet co	nnection, web	cam, account on a s	pecific
software/platformetc	.):				
24 Course Policies:					
A- Attendance policies:					
B- Absences from exams	and submit	ting assignment	s on time:		
C- Health and safety pro					
D- Honesty policy regard	ding cheating	g, plagiarism, m	isbehaviour:		
E- Grading policy:					
F- Available university s	ervices that	support achieve	ment in the cour	rse:	
25 References:					
A- Required book(s), as	signed readir	ng and audio-vis	suals:		
B- Recommended books	s, materials, a	and media:			
26 Additional infor	mation:				
27 00 0 1			~.		
Name of Course Coordin					
Head of Curriculum Cor Head of Department:					
Head of Curriculum Cor					
Dean:					

Note: This template is for illustrative purposes – eg assessment and grading scales are illustrations of how it is done at this university reflecting the grading policy as well as other policies of this university.

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University of New England Syllabus template



INNOVATION FOR A HEALTHIER PLANET

Course Coordinator(s)*:	
Office Location(s):	
Email(s):	
Phone:	
Office Hours:	

Other Course Instructors:

Office Location(s):

Email(s):

Phone:

Office Hours:

COURSE CREDITS

[Type number of course credits here]

PRE-REQUISITES

[Successful completion of:]

CLASS TIME / COURSE LOCATION

[Type day, time the class will meet, and classroom.

Include learning platform URL address.

Include breakdown of didactic, clinical, practicum, etc., if appropriate]

COURSE DESCRIPTION

This should be the course description from the University/College catalog.

COURSE OBJECTIVES

Upon successful completion of this course, the student will be able to:

- 1. [Type objective 1 of the course here]
- 2. [Type objective 2 of the course here]
- 3. [Type objective 3 of the course here]
- 4. [Type objective 4 of the course here]

^{*}Students should address all course-related questions such as missed classes and exams to the course coordinator(s)

REQUIRED TEXTBOOK(S)

[Type required texts here]

PROGRAM OUTCOMES

1.

ACCREDITATION STANDARDS

Identify accreditation agencies in bold.

WESTBROOK COLLEGE OF HEALTH PROFESSIONS (WCHP) CORE VALUES

[Type required texts here]

- 1. Academic Excellence and Lifelong Learning
- 2. Integrity
- 3. Service
- 4. Relational Connectivity
- 5. Quality of Life and Well-Being
- 6. Collaboration
- 7. Cultural Diversity, Difference, and Inclusivity

INTERPROFESSIONAL COMPETENCIES (Optional)

[Those addressed – describe how your course meets them]:

- 1. Roles and Responsibilities for Collaborative Practice
- 2. Values and Ethics for Interprofessional Practice
- 3. Interprofessional Communication
- 4. Interprofessional Teamwork and Team-Based Care

COURSE REQUIREMENTS

[Describe what is required: attendance, participation, readings, assignments] The culminating activity/activities in this course are [....] and require grades as noted in the Assessment section to successfully complete this course.

COURSE OBJECTIVE MAPPING (Optional)

Objective #	Assessment Method(s)	Program Outcome(s)	Appendix 1 Domain(s)	IPE Competencies	Pre-APPE Competencies

COURSE SCHEDULE

Unit titles and dates

Calendar of expected reading assignments or outside preparation. You may choose to include a table of classes and assignments or a graphic organizer of the course.

EVALUATION/ASSESSMENT

[Course/program statement on evaluation and assessment including how the final grade is determined]

COURSE GRADING

[List of graded activities/assignments and brief outline of points/grade percentage assigned] GRADING SCALE

94 - 100	Α		4.00	
90 - 93		A-		3.75
87 - 89		B+		3.50
84 - 86		В		3.00
80 - 83		B-		2.75
77 – 79		C+		2.50
74 – 76		С		2.00
70 - 73		C-		1.75
67 - 69		D		1.00
64 - 66		F		0.00
< 64				

RESPONSIBILITIES OF FACULTY

[Method(s) of course delivery (e.g., traditional lecture, student-centered discussion]

ATTENDANCE / PROFESSIONAL BEHAVIORS

Professional behaviors include attendance, punctuality, attitude, preparedness, and participation in class discussions. Attendance is required for all classes. Unexcused absences or tardiness will lower the participation grade. Students are responsible for all material covered in class as well as the material presented in the required readings and assignments.

ACADEMIC INTEGRITY:

The University of New England values academic integrity in all aspects of the educational experience. Academic dishonesty in any form undermines this standard and devalues the original contribution of others. It is the responsibility of all members of the university community to actively uphold the integrity of the academy; failure to act, for any reason, is not acceptable. Charges of academic dishonesty will be reviewed by the dean of the appropriate College and, if upheld, will result at minimum in a failing grade on the assignment and a maximum of dismissal from the University of New England. Academic dishonesty includes, but is not limited to, the following:

- 1. Cheating, copying, or the offering or receiving of unauthorized assistance or information.
- 2. Fabrication or falsification of data, results, or sources for papers or reports.
- 3. Actions that destroy or alter the work of another student.
- 4. Multiple submissions of the same paper or report for assignments in more than one course without permission of each instructor.
- 5. Plagiarism: the appropriation of records, research, materials, ideas, or the language of other persons or writers and the submission of them as one's own

STUDENT ACADEMIC SUCCESS CENTER (SASC)

The Student Academic Success Center offers a range of free services to support your academic achievement, including tutoring, writing support, digital project support for ePortfolio, test-prep and studying strategies, learning consultations, and many online resources. To see and schedule available appointments go to the website or visit the SASC. To access our online resources, including links, guides, and video tutorials, visit website.

STUDENTS WITH DISABILITIES

The University of New England is committed to creating a learning environment that meets the needs of its diverse student body and will make reasonable accommodations for students with documented disabilities. Any student eligible for and needing academic adjustments or accommodations because of a disability is requested to speak with the professor at the beginning of the semester. Registration with the Student Access Center is required before accommodation requests can be granted. Visit https://www.une.edu/student-access-center for more information.

HIPAA AND FERPA

All courses at the University of New England will follow all HIPAA and FERPA guidelines published and will be consistent with state and federal law, as well as UNE policy.

WCHP COURSE AND INSTRUCTOR EVALUATION POLICY

Course and instructor evaluations are important tools for evaluating the quality of your education, and for providing meaningful feedback to course instructors on their teaching. In order to assure that the feedback is both comprehensive and precise, course evaluations are a required element of every course. Students who complete all their evaluations on time will have access to their grades as soon as they are available. For those students who do not complete their evaluations, grades will be masked for approximately two weeks.

CANCELLATION / DELAY POLICY

Occasionally, severe weather can cause cancelations or delays. Announcements are made by 5:45 a.m. based on conditions at the University and the immediate surrounding area after consulting with the weather service. Please call (207) 602-2211 to access UNE's voice mail on storm days. A short message will inform you if the University is open, closed, or delayed. These announcements can also be accessed at UNE.edu, and through local television stations. The University's decision to cancel classes and/or activities later in the day, evening, or weekends due to inclement weather will be made at least two hours prior to the class or event. Unless UNE announces a closing via the media, we are open. In certain circumstances, faculty may elect to cancel classes when the University is open. In this case, they are responsible for informing their students in a timely manner.

SUBJECT TO CHANGE STATEMENT:

This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is the student's responsibility to be aware of changes presented by the instructor.

DEPARTMENT/COURSE/INSTRUCTOR SPECIFIC POLICIES

[Include specific policies unique to your department and/or classroom/course] ZOOM/VIDEO-CONFERENCING POLICY (OPTIONAL USE):

The same professional behavior referenced in the Attendance/Professional Behaviors section above is expected for classes meeting via remote online conference platforms, such as Zoom.

- Video cameras must be always turned on. If this presents a challenge (e.g., camera not functioning, insufficient bandwidth, or other personal situations), faculty must be notified in advance.
- Be mindful of your appearance and surroundings and position yourself facing a light source so you can be seen clearly.
- Mute your microphone unless you are speaking.
- Use the raised hand or the chat function to ask a question to avoid speaking over classmates.

- For everyone's benefit, join the course in as quiet a place available and be in the classroom prior to the class start time.
- Close browser tabs not required for participating in class.

The success of this form of learning will depend on the same commitment brought to the physical classroom.

Note: This template is for illustrative purposes – eg assessment and grading scales are illustrations of how it is done at this university reflecting the grading policy as well as other policies of this university.

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Example from the University of Queensland illustrating the OSCE marking criteria with graded descriptors.

	OSCE			AUSTRALIA	١٧			
S	Student Name:		Examiner Initials:	Kials:			ð	Overall Score:
Safe	Date: Safety: Pass / Fail (circle) Comment	ر ا						
	Grade(1-7)	-	2	က	4	ıç	9	7
	Score (0-10)	0 - 3.4	3.5 - 4.4	4.5 - 4.9	5.0 - 6.4	6.5 - 7.4	7.5 - 8.4	8.5 - 10
	Descriptor	Low Fail; Absence of	⊦aıl; Mi nimal	Marginal Fail; Developing	Pass. Functional	Credit. Proficient	Distinction. Advanced	High Distriction; Exceptional
	Patient Interview (15%)	evidence of achievement	evidence of achievement	achievement	achievement	achievement	achievement	achievement
_	Structure of interview	No evidence of	Minimal evidence	Limited	Acceptable	Good	Advanced	Exceptional
		appropriate	of appropriate	structure of	structure of	structure of	shocking of	structure of
		structure of interview	structure of interview	interview	interview	interview	IIterview	interview
2	Quality of information gained	No evidence of	Deficiencies in	Superficial	Acceptable	Good	Advanced	Exceptional
		gaming relevant.	quality of	queality of	quality of	dusality of	quality of	questity of
		queally	mormanon	mormanon	mamon	Information	information	information
		information	gained	gained	gained	gained	gained	gained
က	Modification / adaptation to suit	No evidence of	асиврила вищим	разви	Acceptable	Good	Advanced	Exeptional
	patient presentation and context	modification to	of modification to	modification to	modification to	modification to	modification to	modification to
		suit patient	suit patient	suit patient	suit patient	suit patient	suit patient	suit patient
	Physical Examination (20%)							
τ-	Structure of examination	No evidence of	Manage evidence		Acceptable	2000	Advanced	Exceptional
		apendonde	of appropriate	structure of	structure of	structure of	structure of	structure of
		structure of examination	structure of examination	examination	examination	examination	examination	exammahon
2	Suitability of technique/s	No evidence of	Winimal evidence	рашт	Acceptable	Good	Advanced	Exceptional
		selection of	of selection of	selection of	selection of	selection of	selection of	selection of
		suitable	suitable	suitable	examination	examination	examination	examination
		examination	examination	examination techniques	techniques	techniques	techniques	techniques
er.	Instruction + explanation for	No evidence of	Winma evidence	Immed	Acceptable	Good	Advanced	Executional
	tachniques	acomorale	of acomorate	methodom /	memorino +	+ output	nshirther +	+ outputsu
		instruction / explanation	instruction / explanation	explanation	explanation	explanation	explanation	explanation
4	Implementation of techniques +	No evidence of	Minimal evidence	u suogen	Acceptable	Good	Advanced	Exceptional
		appropriate	of appropriate	examination +	examination +	exammanon +	exammation +	exammanon +
		examination / patient handing	examination / patient handing	patient handling	patient handling	patient handling	patient handling	patient handling
9	Modification / adaptation to suit	No evrolence of	Minmal evidence		Acceptable	Cood	Advanced	Exceptional
	patient presentation and context	modification to	of modification to	modification to	modification to	modification to	modification to	modification to
		suit pelient	suit patient	suit patient	suit patient	suit patient	suit patient	suit patient



	Grade (1-7)	1	2	8	4	5	9	7
	Score (0-10)	0 - 3.4	3.5 - 4.4	4.5 - 4.9	5.0 - 6.4	6.5 - 7.4	7.5 - 8.4	8.5 - 10
	Descriptor	Low Fail; Absence	Fail.	Marginal Fail;	Pass.	Credit.	Distinction.	High Distinction;
		of evidence of	Minimal evidence	Developing	Functional	Proficient	Advanced	Exceptional
	Intervention (40%)	achievement	of achievement	achievement	achievement	achievement	achievement	achievement
1	Positioning of self, patient +	No evidence of	Minimal evidence	Limitations in	Acceptable	Good	Advanced	Exceptional
	equipment	appropriate	of appropriate	positioning	positioning	positioning	positioning	positioning
		positioning	positioning					
2	Instruction + explanation of	No evidence of	Minimal evidence	Limited instruction	Acceptable	Good	Advanced	Exceptional
	intervention/s	appropriate	of appropriate	/ explanation	instruction +	instruction +	instruction +	instruction +
		instruction /	instruction /		explanation	explanation	explanation	explanation
		explanation	explanation					
က	Implementation of intervention/s +	No evidence of	Minimal evidence	Limitations in	Acceptable	Good	Advanced	Exceptional
	patient handling	appropriate	of appropriate	treatment	treatment	treatment	treatment	treatment
		treatment	treatment	implementation /	implementation +	implementation +	implementation +	implementation +
		implementation /	implementation /	patient handling	patient handling	patient handling	patient handling	patient handling
		patient handling	patient handling					
4	Modification / adaptation to suit	No evidence of	Minimal evidence	Limited	Acceptable	Good modification	Advanced	Exceptional
	patient presentation and context	modification to	of modification to	modification to	modification to	to suit patient	modification to	modification to
		suit patient	suit patient	suit patient	suit patient		suit patient	suit patient
	Clinical reasoning (20%)							
1	Identification of patient problem/s	No evidence of	Deficiencies in	Superficial	Acceptable	Good	Advanced	Exceptional
	with rationale	identification of	identification of	identification of	identification of	identification of	identification of	identification of
		patient problems	patient problems	patient problems	patient problems	patient problems	patient problems +	patient problems +
		/ rationale	/ rationale	/ rationale	+ rationale	+ rationale	rationale	rationale
7	Development of treatment plan,	No evidence of	Deficiencies in	Superficial	Acceptable	Good	Advanced	Exceptional
	including rationale	appropriate	treatment plan	treatment plan /	treatment plan +	treatment plan +	treatment plan +	treatment plan +
		treatment plan /	/ rationale	rationale	rationale	rationale	rationale	rationale
		rationale						
	Professionalism (5%)							
П	e.g., Rapport, engagement, etiquette,	No evidence of	Minimal evidence	Limited	Acceptable	Pood	Advanced	Exceptional
	demeanour, ethical approach	professionalism	of professionalism	professionalism	professionalism	professionalism	professionalism	professionalism

Comments

The University of Queensland (v 2020)

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University of New England, Physical Therapy Program, Program assessment tools

The program assessment plan and summary of outcomes table, assessment calendar, and annual summary form

The program assessment plan addresses the curriculum as a whole and incorporates consideration of the changing roles and responsibilities of the physical therapy practitioner and the dynamic nature of the profession and the health care delivery system. Assessment data are collected from appropriate stakeholders as indicated.

For each of the following items, the program provides an analysis of relevant data and identifies needed program change(s) with timelines for implementation and reassessment. The assessment process is used to determine the extent to which each standard is met. "Program" refers to the entirety of the UNE Department of Physical Therapy. Data and outcomes are reported quarterly at Department meetings where decisions/determinations about any necessary action plans are discussed and established. The Program Director is responsible for follow-up and communication with any related parties as indicated. An annual summary report is completed in November of each year.

STUDENTS – Student outcomes are assessed in several areas. These include performance in individual courses, clinical readiness, remediation needs and successes, and portfolios.

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
The data collected in other areas of the Assessment Plan support the achievement of Program Goals by students. These include graduating compassionate, collaborative leaders who are critical thinkers, and who promote health and wellness; development of academic excellence; student involvement in physical therapy clinical practice across the continuum of care; generation and dissemination of new knowledge; and to identify, develop, and promote opportunities for engagement in community and professional service.	Variety of evidence from outcomes listed in this document	Nov-Dec	All program faculty	2A
All students were determined to be ready for each of their clinical placements using our "clinical readiness" process.	 Department meeting agendas 		DCE	4N, 6J
Fewer than 3 (≤5%) students in any cohort placed on academic probation in any cohort.	SDC Report		SDC Chair	5E
100% of students who participated in an academic remediation plan were successful.	SDC Report		SDC Chair	5E
of students successfully passed their Portfolio assignment.	Course Grades		Course instructor	6L5

CORE AND ASSOCIATED FACULTY

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
Average student course evaluation ratings for each course were ≥ 3.5 / 5.	● CourseEval data	Nov-Dec	Program Director or designee	4E, 6I
All faculty who teach > 50% of a course received and average CourseEval ratings of ≥ 3.5 / 5.	CourseEval data			4E
All faculty members (as applicable) were successful in their individual quests for reappointment and promotion.	●UNE President			4B
Core faculty credentials are consistent with CAPTE standards, ACAPT positions, and institutional performance standards.	Ongoing assessment of faculty mix			4A
The mix of core and associated faculty expertise is sufficient to support the Program curriculum.	 Student or graduate feedback 			4K
	Faculty input			
The total number of scholarly works produced by core faculty decreased by no more than 25%.	Annual Performance Appraisal			4E
100% of core faculty participated in at least one faculty development opportunity.	Annual Performance Appraisal			4E
100% of course coordinators completed the end-of-semester process of self-reflection.	Annual Performance Appraisal			4E
End of course reflections were completed by all faculty, each semester.	Annual Performance Appraisal			4E
100% of core faculty met annual scholarship expectations.	Annual Performance Appraisal			4B
Faculty are satisfied with the scope, quality, length, and sequencing of the curriculum, including didactic and clinical education courses.	Annual Survey			2C, 6A

CLINICAL FACULTY

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
All student ratings of Clinical Instructors were ≥ 3/5.	Student evaluation of clinical instructors	Nov-Dec	DCE	40
The number of available Cls, APTA credentialed Cls, or Cls with other advanced certification (e.g., ABPTS, FAAOMPT but not first aid/CPR) remained the same or increase.	Clinical site information form			40
All CIs for CP 1, 2 and 3 had at least 1 year of clinical experience.	Clin Ed placement data			40

THE PROGRAMME

General

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for Gathering Information	Related CAPTE Criteria
The annual graduation rate was > 90% (> 90% of students graduate on time).	Registrar	Nov-Dec	Program Director	1C1
The 1 st time NPTE pass rate for the most recent graduating cohort was > 90%.	NPTE Report			1C2

Policies and procedures

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
The Student Handbook and Department Policies and Procedures Handbook were reviewed by the faculty and revised as needed to ensure that they meet the needs of students, faculty, and staff.	Annual review of Program Handbooks	July/August	Faculty Affairs Committee	3D
Program policies and procedures and institutional policies are consistent with CAPTE standards and ACAPT positions.	 Annual review of Program Handbooks 			3D, 3H
Policies contained in the DPT Student Handbook, Department Policies and Procedures Handbook, and Clinical Education Handbook consistent with institutional policy.	Annual review of Program Handbooks			3D, 3G, 3H
Institutional policies adequately support the mission of the Program.	Annual review of Program Handbooks			3H
Clinical education policies and procedures were reviewed and revised as needed to ensure that they meet the needs of students and program.	Annual review of Program Handbooks			3D
Students are generally satisfied with program policies and procedures in the DPT Student Handbook and any institutional policies affecting their DPT education.	Annual Survey			2C
Students are generally satisfied with clinical education policies and procedures.	Annual Survey			2C

Admissions and enrollment: The admissions process, criteria and prerequisites meet the needs and expectations of the program. Program enrollment appropriately reflects available resources, program outcomes, and workforce needs.

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for Gathering Information	Related CAPTE Criteria
DPT admissions criteria and prerequisites are consistent with department policy and strategic plan.	Admissions policies	September	Admissions Committee	2B, 2B1, 2B2
DPT admissions criteria and prerequisites are consistent with UNE policies, ACAPT positions, and CAPTE standards.	Admissions policies			2B1, 2B2
Acceptance was offered to at least 62 qualified students.	Admissions Reports			2B1, 2B2
More than 5% of students enrolled indicated a minority status.	Admissions Reports			2B1, 2B2

There was a < 10% decline in the # of applicants who met all admissions criteria compared to the previous year.	Admissions Reports		2B1, 2
There was a < 10% increase in the # of applicants who turned down an offer of acceptance into the Program, compared to the previous year.	Admissions Reports		2B1, 2I
No students withdrew from the program within the first 6 weeks.	Admissions Reports		2B1

Curriculum

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	CAPTE Criteria
The mean aggregate NPTE total score for the most recent graduating class better than 1 standard deviation below the national mean.	NPTE Report	Nov-Dec	Assessment Committee	1C2
All aggregate NPTE content area scores for the most recent graduating class better than 1 standard deviation below national mean.	NPTE Detailed Report	September	Assessment Committee	1C2
All content areas of the Physical Therapy Graduate Questionnaire (PTGQ) have aggregate scores of: "agree" / "good" / "very often"/ "satisfied" or better on items with those as positive responses "never" on items where that is a positive response General positivity on areas measured in Domain 4.	Annual PTGQ results	September	Assessment Committee	1C2, 2C
All course objectives for all courses in the curriculum clearly linked to program student learning outcomes and CAPTE standards.	Curriculum committee report	Nov-Dec	Curriculum Committee	1C5
The curriculum meets all relevant CAPTE standards.	JUN curriculum mapping report	Nov-Dec	Curriculum Committee	1C5
100% of students achieve the program student learning outcomes.	Comprehensive exam results	June	Comp Exam Coordinator	1C5
All courses added to the curriculum were reviewed and approved by the faculty.	Dept meeting minutes Curriculum committee report	Nov-Dec	Curriculum Committee	6A, 6G
The curriculum scope, quality, and sequencing are consistent with guidance from professional sources.	Curriculum committee report	Nov-Dec	Curriculum Committee	6A
All students were placed in clinical education sites for which they had adequate prior didactic instruction.	Annual clinical ed. Report	June	DCE	6J
Identified curricular needs were addressed.	Curriculum Committee minutes	Nov-Dec	Curriculum Committee	6A, 2C
	Assessment Committee minutes			
	Department meeting minutes			
Trends in student clinical performance are identified and addressed.	At the end of each semester	June	DCE	1C4, 2C
	 Annual clinical ed. Report 			

RESOURCES

Expectations and Thresholds	Source(s) of	Annual	Individual(s)	Related
	Information	Review	Responsible for	CAPTE Criteria
		Deadline	gathering information	
There is enough adequate clinical sites to allow students to progress according to schedule.	Annual Clinical Education Report	Nov-Dec	DCE	8F, 8G
Compared to the previous year, the number, depth, and/or breadth of clinical sites available to students did not decline more than 10%.	Annual Clinical Education Report		DCE	8F
The program maintained access to sufficient part- time and/or full-time clinical education sites for students.	Annual Clinical Education Report		DCE	8F
Students and faculty are generally satisfied with the amount and adequacy of available teaching and research space and resources (including faculty, administrative staff, and guest lecturers) and Student Services (including Disability Services, Student Academic Success Center, Counseling Services, Graduate Student Affairs, Library Services).	PTGQ Report Surveys of students & faculty		Program Director or designee	8B, 8C, 8D, 8E
Available resources are congruent with CAPTE standards and ACAPT positions.	 Assessment of space, budget, and other resources 		Program Director	8A-H
Less than 30% of core faculty and administrative staff positions were vacant or filled temporarily (e.g., with associated faculty).	Staffing reportBudget		Program Director	8A
The number of core faculty FTEs has not decreased by more than 25%.	Staffing reportBudget		Program Director	8A
The PD and DCE positions are filled with permanent individuals.	Staffing report Budget	1	Program Director	8A
The student / core faculty ratio is lower than 18:1.	Staffing report Budget		Program Director	8A
Less than 20% of core faculty and administrative staff positions are projected to be vacant.	Staffing report Budget	-	Program Director	8A, 8B
Compared to the previous year, was there < 25% reduction in # of approved core faculty or administrative staff positions.	Staffing report Budget	-	Program Director	8A, 8B
The operating budget (excluding salary and benefits) was adequate to meet department needs (< 10% annual decline or < 25% decline in past 3 years).	Resource Survey Budget		Program Director	8C
The salary budget (excluding benefits) was adequate to meet department needs (< 10% annual decline or < 25% decline in past 3 years).	Budget		Program Director	8C
All requests for equipment and educational supplies were funded.	Resource Survey Rudget		Program Director	8C, 8D4
There was a less than 25% change in % of curriculum taught synchronously or asynchronously.	Budget Core faculty input Curriculum	-	Curriculum Committee	6I, 6K
Technology, library and learning resources, and student services are adequate to meet student needs.	Review • Resource Survey		Program Director	8D, 8E

ALUMNI:

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
Graduates feel prepared for clinical practice.	15-month post graduation surveys of graduates and employers	October	Program Director	1C5
100% of those wanting to be employed as physical therapists are.	15-month post graduation surveys of graduates and employers			1C3
Graduating students are generally satisfied with the scope, quality, length, and sequencing of the curriculum, including didactic and clinical education courses.	15-month post graduation surveys of graduates and employers			2C

EMPLOYERS:

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
The average 1-year post-graduation employment rate of the 2 most recently graduating is > 95%.	15-month post graduation surveys of graduates and employers Employer Focus Group	Nov. / Dec.	Program Director	2C
Employers generally satisfied with the quality of recent UNE graduates for meeting workforce needs.	15-month post graduation surveys of graduates and employers Employer Focus Group		'	2C
Employers feel that their UNE new graduate employees were prepared for clinical practice.	Employer survey Employer Focus Group			2C

OTHER STAKEHOLDERS:

Expectations and Thresholds	Source(s) of Information	Annual Review Deadline	Individual(s) Responsible for gathering information	Related CAPTE Criteria
The Advisory Committee meets 2 times per year. Their input and feedback are communicated to Program faculty and integrated into Program planning.	Advisory Board minutes Department meeting minutes	Nov. / Dec.	Program Director	2C
Program students and faculty are engaged, competent, and easy to work with by other UNE programs and initiatives such as CECE, the SIM Lab, IRB, Service Learning office, SASC, etc.	Stakeholder Survey		•	2C

Programme assessment calendar

The curriculum assessment plan is written and addresses the curriculum. The assessment plan includes assessment of individual courses and clinical education. The plan incorporates consideration of the changing roles and responsibilities of the physical therapy practitioner and the dynamic nature of the profession and the health care delivery system. Assessment data are collected from appropriate stakeholders including, at a minimum, program faculty, current students, graduates of the program, and at least one other stakeholder group such as employers of graduates, consumers of physical therapy services, peers, or other health care professionals. The assessment addresses clinical education sites including, at a minimum, the number and variety and the appropriate length and placement within the curriculum.

Month	Assessment Focus	Description	Responsible Party
June	General	Root cause analysis of concerning issues potentially arising from multiple program areas. Use all data listed below along with PT GQ, SFBPT etc	Program Director with Faculty
	Faculty	The collective core associated, and clinical education faculty meet program and curricular needs.	Program Director
	Policies & Procedures	Report to University Assessment Committee Review of handbooks - student, program and clin ed Key markers: • Were students generally satisfied with program and clin ed policies and procedures affecting their DPT education? • Were handbooks /policies reviewed and revised as needed	Program Director Faculty affairs/ Director of Clinical Ed
	Students	Aggregate CPI data from CP3	Director of Clinical Ed
July	Program Enrollment	Review enrollment	Program Director
August	Faculty	End of semester faculty reflections and resource questions	All faculty
	Faculty	Aggregate CourseEval data Key markers Average student course evaluation ratings for each course ≥ 3.5/5. all core faculty and to associated faculty who teach > 50% of a course	Program Director
	Students	Summary of semester clinical ed placements and student issues	Director of Clinical Ed
	Students	End of semester student feedback	Assessment Committee
	Students	Get FSBPT Report pass rate Key markers: Was the mean aggregate NPTE total score for the most recent graduating class better than 1 standard deviation below the national mean? Were all aggregate NPTE content area scores for the most recent graduating class	Program Director

Month	Assessment Focus	Description	Responsible Party
		better than 1 standard deviation below national mean?	
	Graduates/Curriculum	1-year post graduation survey of graduates Key markers: Did graduates from the previous graduation year feel adequately prepared for clinical practice? 1-year post graduation employment rate - Employer satisfaction	Program Director
	Resources	Review resources - financial resources, staff, space, equipment, technology, materials, library and learning resources, and student services.	Program Director
	Policies & Procedures	Review and update program policies and procedures	Faculty Affairs Committee
September	Curriculum	Did employers feel that their UNE new graduate employees were adequately prepared for clinical practice?	PD
	Students	Aggregate CPI data from CP2	Director of Clinical Ed
October	Curriculum	Annual Clinical Education comprehensive report for CAPTE AAR = Academic Year	Director of Clinical Ed
November	General	Annual Accreditation Report CAPTE AAR	Program Director
	Students	Review # students on probation during the program? SCD report	Program Director
		Environmental surveys of students & faculty Key markers: Students and faculty generally satisfied with the amount and adequacy of available teaching and research space and resources (including faculty, administrative staff, and guest lecturers) and Student Services (including Disability Services, Student Academic Success Center, Counseling Services, Graduate Student Affairs, Library Services) needed to support the DPT-DP?	
	Curriculum	Review curricular mapping Key markers: Are the course objectives for all courses in the curriculum clearly linked to program student learning outcomes and CAPTE standards? Does the DPT-DP curriculum adequately meet all relevant CAPTE standards? JUN curriculum mapping report Did 100% of students achieve the program student learning outcomes? Comprehensive exam results Were all courses added to the curriculum reviewed and approved by the faculty?	Curriculum Committee
December	Curriculum	CAPTE Annuar Assessment Report (AAR)	Program Director
	Faculty	End of semester faculty reflections	All faculty
<u> </u>	Students	End of semester student feedback Key markers:	Program Director

Month	Assessment Focus	Description	Responsible Party
		Were average student course evaluation ratings for each course ≥ 3.5 / 5? all core faculty and to associated faculty who teach > 50% of a course	-
	Students	Summary of semester clinical ed placements and student issues	Director of Clinical Ed
January	Students	Aggregate CPI data from CP1	Director of Clinical Ed
February	Admissions	Report on Review of admissions process, criteria, and prerequisites Key markers: Are the DPT admissions criteria and prerequisites consistent with department policy and strategic plan? Do UNE policies, ACAPT positions, and CAPTE standards remain consistent with DPT admissions criteria and prerequisites? Did we offer acceptance to at least 62 qualified students? Did we enroll > 5% minority students? Compared to the previous year, was there < 10% decline in #applicants who met all admissions criteria? Compared to the previous year, was there < 10% increase in # applicants who turned down an offer of acceptance?	Admissions Committee
March April	Faculty	Were all faculty members successful in their individual quests for reappointment and promotion?	Program Director
May	Faculty	End of semester faculty reflections	All Faculty
	Students	End of semester student feedback Key markers: Were average student course evaluation ratings for each course ≥ 3.5 / 5? all core faculty and to associated faculty who teach > 50% of a course	Program Director
	Students	PTGQ administered ?? feedback session/focus group	Program Director
	Students	Academic standing summary Key markers: # of students put on probation	SDC
	Students	Summary of semester clinical ed placements and student issues	Director of Clinical Ed
	Faculty	Professional development, scholarly productivity, and reflection on teaching Key markers: Scholarly works produced by core faculty Participate in faculty development opportunities Did 100% of course coordinators complete the end-of-semester process of self-reflection?	Program Director

Programme Assessment Results

Section 1: Review Information:

Academic Year	Date of Initial Review:	
Reviewed:		
Name of Reviewer(s):	Role in Department:	

Section 2: Strengths

Having reviewed the items assessed during the past year, the following strengths have been identified.

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	Item	Action(s) to be taken and responsible	Expected timeline
		party.	

Section 3: Weaknesses and Areas for Improvement

Having reviewed the items assessed during the past year, the following weaknesses have been identified.

Item	Action(s) to be taken and responsible	
	party.	

Section 4: Areas or items that could not be analyzed given available data (if applicable)

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