

1. INTRODUCTION

1.1 Rationale for developing study programme

In 2003, in the Strategic Framework for Health Development in Sri Lanka, the Ministry of Health accepted that the lack of opportunity for appropriate education had lowered the quality of its practitioners. In the same report, the Ministry suggested re-training to upgrade the skills of existing practitioners and to maintain their competence through professional development in order to ensure high quality health care provision. It has also been recommended that physiotherapy courses should be conducted by the Sri Lankan Universities. About 4-5 years ago, two universities (Colombo and Peradeniya) commenced courses for direct entry, internal degree programmes in Physiotherapy. However, they have very limited provision for lateral entry of those who are already in service. Thus the Government Physiotherapy Association has identified an urgent need to establish a lateral-entry, degree-level study programme in Physiotherapy for those who are already in service.

This curriculum is intended to introduce a new study programme that will enable holders of the Diploma in Physiotherapy, awarded by the School of Physiotherapy & Occupational Therapy of Sri Lanka (run by the Ministry of Health), to upgrade their qualification to a Bachelor of Science in Physiotherapy (BScPT). The study programme has been designed with intention of filling the gap that exists between the course content of the two-year Diploma programme and the BSc degree programmes currently offered by the Universities of Peradeniya and Colombo (see Annexure 1). The proposed BSc (PT) course will be conducted by the Faculty of Medicine for the Centre for Distance and Continuing Education of the University of Kelaniya, as an external degree programme with strong learner support for face-to-face learning.

The curriculum strands include theoretical and self-directed learning, clinical practice experience, and research and skill development in a variety of settings that include medical and rehabilitation at the institutional level as well as the community level.

2. ADMISSION CRITERIA AND METHOD OF SELECTION OF STUDENTS

2.1 Admission criteria

In order to be eligible for entry to the study programme leading to the qualification of Bachelor of Science (Physiotherapy), therapists must fulfil the following requirements:

1. Possess a Diploma in Physiotherapy from the School of Physiotherapy and Occupational Therapy of the Ministry of Health, Sri Lanka¹ and registration with the Sri Lanka Medical Council,

¹ Students must have three passes in one sitting at the GCE (AL) examination in order to be eligible for admission to this training programme. This requirement has been in place since about 1980.

and

- 2 Have at least three years of clinical (or related) experience working as a Physiotherapist during the 5-year period immediately preceding the closing date for applications. Related experience may include work within the area of physiotherapy in a recognized institution.

and

- 3 Be successful at the interview (Please see Appendix 1 for Interview Guide) and English test conducted by the University.

2.2 Method of selection

Applicants who fulfil the admission criteria will be interviewed and selected based on work experience, evidence of continuing professional development in the last 5 years and competency in English and IT.

The annual intake will be limited to not more than 20 students.

Before final registration on the course, selected therapists will need to provide written consent from the Director of his / her institution that he / she can be released for clinical practice in the identified departments, with cover-up arrangements from among the other physiotherapists within the workplace or from the course.

3. DETAILS OF STUDY PROGRAMME

3.1 Programme Aims and learning outcomes

On completion of the Bachelor of Science (Physiotherapy) course, a graduate should be able to:

- advance his or her practice with new knowledge, skills and attitudes
- enhance transferable skills which will contribute to sharpen professional practice
- develop abilities to improve professional practice continuously on the basis of evidence
- develop abilities to discover new physiotherapy approaches and share the findings with other members of the profession in Sri Lanka and all over the world through research and publications
- plan and implement new approaches to improve the health care system in the country in relation to physiotherapy and rehabilitation.

The course offers 120 credits (Level 6 of the Sri Lanka Qualification Framework of Sri Lanka). The above learning outcomes of the programme are formulated in compliance with Level 6 Competencies (Table 1). A subject benchmark for physiotherapy in Sri Lanka is yet to be defined. However, the above learning outcomes are compatible with undergraduate programmes in physiotherapy, which are operational in Sri Lanka. The focus of outcomes is not only on bridging the gaps in knowledge and skills but also on transforming the therapist into a professional by encouraging professional and personal development in related areas (e.g. critical thinking, communication, management and leadership). The specific objectives,

content and assessments of course units are aligned well with the learning outcomes of the programme.

Table 1. Comparison of course outcomes of the proposed physiotherapy programme and competencies laid down for Level 6 in the Sri Lanka Qualification Framework

Course outcomes Competencies expected in qualification framework	Advance his or her practice with new knowledge, skills and attitudes	Enhance transferable skills which will contribute to sharpen professional practice	Develop abilities to improve professional practice continuously on the basis of evidence	Develop abilities to discover new physiotherapy approaches and share the findings with other members of the profession in Sri Lanka and all over the world through research and publications	Plan and implement new approaches to improve the health care system in the country in relation to physiotherapy and rehabilitation
Critically analyze data, make judgments and propose solutions to problems	X		X		X
Use practical skills and enquiry efficiently and effectively within the area of study	X				X
Construct and sustain arguments and use these arguments, ideas and techniques in problem solving	X				X
Demonstrate awareness of the current developments in the area of study				X	
Engage in independent learning using scholarly reviews and secondary sources of information			X		
Communicate information, ideas, issues and solutions efficiently and effectively		X			
Exercise initiative, personal responsibility and accountability		X			X
Undertake further training and develop additional skills		X	X		
Exercise leadership in the professional environment/work place		X			X
Demonstrate positive attitudes and social responsibility	X				X

3.2 Structure of study programme

3.2.1 Composition of the programme

'Bachelor of Science (Physiotherapy)' will be a programme of 120 credits. Therapists holding a Diploma in Physiotherapy will be exempted from completing 60 credits through general exemption of prior learning on the Diploma in Physiotherapy and experiential learning as set out on Tables 2 & 3.

They are required to earn 60 more credits to be considered for a degree by taking up course units described under the 'Structure of Proposed Programme'.

Table 2. Year 1 of Diploma in Physiotherapy

SUBJECT	Class room theory (hours)	Class room Practical (hours)	Clinical practice (hours)	Equivalent Credits
Anatomy	220	70	-	5
Physiology	150	45	-	3
Physics	80	10	-	5
Kinesiology & Hydrotherapy	80	80	-	3
Therapeutic exercises	60	75	-	10
Manipulative procedures	10	70	-	8
Practice of treatment of patients by physiotherapy	-	-	235	18
Psychology	40	10	-	3
Sub total	640	360	235	55

Table 3. Year 2 Diploma in Physiotherapy

SUBJECT	Class room theory (hours)	Class room Practical (hours)	Clinical practice (hours)	Equivalent Credits
Theory of treatment of patients by physiotherapy - Pathology - Medical and Surgical conditions - Applied physiotherapy	558	-	-	32
Electrotherapy	40	90	-	5
Practice of treatment of patients by physiotherapy		230	865	18
Psychiatry	40	10		2
Subtotal	638	330	865	57

3.2.2 Accreditation of prior and experiential learning

Accreditation of prior learning will be based on the Diploma in Physiotherapy awarded by the School of Physiotherapy and Occupational Therapy of the Ministry of Health. The strands on this study programme (which takes 2 years for completion on a full-time basis), the number

of hours of learning activities per strand and their equivalent credit values are shown below. One credit represents at least 15 hours of lectures, 30 hours of practical and 75 hours of clinical practice

3.2.3 Structure of proposed Diploma-to-Degree upgrade programme

The total number of additional credits to earn the degree is 60. The participants of the course should earn the 60 credits by taking up 14 course units of four core strands and three out of seven course units in the SSC strand. Each strand will have theory and / or practical (workplace-based) units, which will be assessed over two years. Each course unit has assessments attached to it, and therapists must pass all course units in order to qualify with a BScPT (for details about assessment and progression requirements, see section 4 of this document). Please refer to Tables 4 & 5, and Figure 1 below.

Table 4. Structure of Diploma-to-degree upgrade programme

Course code	Course title	Lectures (h)	Clinical/ Practical (h)	Tutor-directed study (h)	Credits
Year 1					
PHTH E36011	Induction course*	7	20	10	1
PHTH E36023 (Core)	Basic Biochemistry, Microbiology and Pharmacology for physiotherapists	30	12	42	3
PHTH E36034 (Core)	Anatomy, Physiology, Applied Exercise Science and Bio-Mechanics and Control of Human Movement for physiotherapy	50	18	48	4
PHTH E36041 (Core)	Psychology for physiotherapy	10		19	1
PHTH E37055 (Core)	Disability studies, including community-based rehabilitation	40	80	27	5
PHTH E37065 (Core)	Evidence-based practice and clinical reasoning	30	70	50	5
PHTH E37073 (Core)	Research methodology	45		30	3
PHTH E37084 (Core)	Clinical Rotation - Neurology		120		4
PHTH E37094 (Core)	Clinical Rotation - Musculoskeletal		120		4
Year 2					
PHTH E46104 (Core)	Clinical Rotation - Respiratory and medical		120		4
PHTH E46114 (Core)	Clinical Rotation - Paediatrics		120		4
PHTH E46124 (Core)	Clinical Rotation - Rehabilitation		120		4
PHTH E47132 (Core)	Management and leadership	40		18	2
PHTH E47142 (Core)	Professionalism in physiotherapy	20		38	2
PHTH E48156 (Core)	Research project	15		360	6
Optional course units (select any 3 of the following)					
PHTH E49163 (Optional)	Physiotherapy in Sports	20	36	31	3
PHTH E49173 (Optional)	Physiotherapy in Mental Health	20	36	31	3
PHTH E49183 (Optional)	Physiotherapy in Ergonomics and Occupational Health	20	36	31	3
PHTH E49193 (Optional)	Physiotherapy in Burns and Plastics	20	36	31	3
PHTH E49203 (Optional)	Physiotherapy in Oncology	20	36	31	3
PHTH E49213 (Optional)	Physiotherapy in Disaster & Emergency Management	20	36	31	3
PHTH E49223 (Optional)	Physiotherapy in Woman's Health	20	36	31	3
	Total credits for GPA				60

*not considered for GPA

Table 5. Overview of study programme

	Strands	Course code	Title of course unit	Teaching / learning	Assessment
Core	Applied sciences	PHTH E36023	Basic Biochemistry, Microbiology and Pharmacology for physiotherapists	Theory and practical	SEQs
		PHTH E36034	Anatomy, Physiology, Applied Exercise Science and Bio-Mechanics and Control of Human Movement for physiotherapy		SEQs & Project Report
		PHTH E36041	Psychology for physiotherapy		SEQs
	Clinical physiotherapy	PHTH E37055	Disability studies including community-based rehabilitation	Theory and clinical	Case presentations
		PHTH E37065	Evidence-based practice and clinical reasoning	Theory and clinical	Case presentations
		PHTH E37084	Clinical Rotation - Neurology	Clinical	SEQs & Case presentations (These need to be included in a portfolio with a reflective account for each rotation)
		PHTH E37094	Clinical Rotation - Musculoskeletal	Clinical	
		PHTH E46104	Clinical Rotation - Respiratory and medical	Clinical	
		PHTH E46114	Clinical Rotation - Paediatrics	Clinical	
		PHTH E46124	Clinical Rotation - Rehabilitation	Clinical	
	Professional and personal development	PHTH E47132	Management and leadership	Theory and practical	Presentations / Significant Event Analysis / Audit
		PHTH E47142	Professionalism in physiotherapy		Case presentations
	Research	PHTH E37073	Research methodology	Theory and practical	Research Proposal & Viva
		PHTH E48156	Research project	Practical (Field work)	Dissertation & Poster presentation/Viva
Optional	Student-selected components	PHTH E49163	Physiotherapy in Sports	Theory and clinical	SEQs & Case presentations
		PHTH E49173	Physiotherapy in Mental Health	Theory and clinical	
		PHTH E49183	Physiotherapy in Ergonomics and Occupational Health	Theory and clinical	
		PHTH E49193	Physiotherapy in Burns and Plastics	Theory and clinical	
		PHTH E49203	Physiotherapy in Oncology	Theory and clinical	
		PHTH E49213	Physiotherapy in Disaster & Emergency Management	Theory and clinical	
		PHTH E49223	Physiotherapy in Woman's Health	Theory and clinical	

Figure 1- Proposed time frames for the conduct of course

Strand	Year 1																Year 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	Semester 1								Semester 2								Semester 1								Semester 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Induction																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

The intended learning outcomes and contents of each course unit, sources of information and supplementary reading lists, as well as the mode of evaluation of each course unit is set out in Section 7 of this document.

3.2.4 The course unit system

The BScPT programme is organized as five strands of study; Applied Sciences (AP), Clinical Physiotherapy (CP), Personal and Professionals Development (PPD), Research (RS) and Student Selected Components (SSC). Each strand has several course units with evaluation based on grade points. The course units under AP, CP, PPD and RS strands are compulsory (core). In the SSC strand, three course units should be selected from a list of seven options (optional). The three optional course units for each batch should be selected by students as a group. Each course unit is assigned a credit value based on the equivalent of 30 hours of study which include face-to-face learning, private study, and practical work in relevant clinical settings (**Error! Reference source not found.**).

3.2.5 Notation of course units

An alpha numeric code is used to identify each course unit. The code consists of four digits prefixed by a set of five letters. All courses on this study programme will carry the letters PHTH (to denote Physiotherapy) and E to denote that it is an external degree programme. . With regards to the 5 digits of the course code, the 1st and 2nd digit denote the year (3 & 4). and the semester (6,7,8 and 9) of study. The 3rd and 4th digits together from the specific number assigned to that course unit for that year of study, whereas the 5th digit signifies the credit value.

4. PROGRAMME DELIVERY AND LEARNER SUPPORT

The programme will be delivered in hybrid mode with face-to-face and self-learning (distance learning) components. The face-to-face sessions will be used to provide basis, guidance and material for self-directed learning in workplace-based settings. Each of the course units comprises a minimum of 15 hours of theoretical, face-to-face learning. In most cases, there is also attached practical work, such as clinical seminars, presentations relevant to a particular course unit. In addition to these study hours, therapists are expected to spend a minimum number of hours (specified in course unit descriptions below) for self-study. Therapists are expected to practise knowledge and skills gained in the theoretical components of study by attending community settings, vocational training institutes and hospital as relevant, in the Clinical Physiotherapy strand.

4.1 Clinical and field placements

The minimum number of clinical practice hours which therapists must attend to qualify for professional registration as a Physiotherapist in Sri Lanka is 1000. For working therapists an additional 500 hours of practical training is required for the upgrade. This is broadly in line with

international recommendations regarding the number of clinical training hours. The clinical rotations will be focus on the following core areas:

- Neurology
- Musculo-skeletal
- Respiratory and medical
- Paediatrics
- Rehabilitation

The duration of each core clinical rotations will be four weeks. As physiotherapy related to these areas is practised in all hospitals, the participating physiotherapists will be encouraged to complete the rotations in their own hospitals. Arrangements will be made to make to internally rotate students between different areas of study with the permission from relevant hospital authorities.

In addition students need to complete a two-week clinical rotation related to each of the three optional strands. Appropriate optional clinical rotations will be organised at the following institutions:

1. National Hospital of Sri Lanka
 - a. Department of Rheumatology and Rehabilitation
 - b. Burns Unit
 - c. Plastic Surgery Unit
 - d. University Psychiatry Unit
2. Colombo North Teaching Hospital, Ragama
3. Rheumatology and Rehabilitation Hospital, Ragama
4. Lady Ridgeway Children's Hospital, Colombo
5. Colombo South Teaching Hospital, Kalubowila
6. Karapitiya Teaching Hospital, Galle
7. National Institute of Mental Health, Angoda
8. Community Based Rehabilitation Programmes
9. Community PT Programmes
10. Mental Hospital – Unawatuna

4.2 Attendance

All practical training, clinical placements, field trips, specialist clinics etc are compulsory and therapists must demonstrate documented 90% attendance at these to be eligible to sit for assessments in the relevant strand. Therapists not completing the required number of clinical practice hours will not be eligible to graduate. Therapists who are unable to attend practical sessions for health reasons for more than 3 days, must produce medical evidence of their situation.

5. EVALUATION CRITERIA

5.1 Assessment of Programme Course Units

The examinations of the programme course units are usually held at the completion of the particular strand. There will normally be one assessment course unit. This may take a number of forms e.g. written exams, written coursework: case studies, essays, presentations, group work, project work, and clinical examinations. The method of evaluation will be notified at the commencement of each course unit. The therapists are expected to maintain a portfolio for their clinical rotations with one reflective account on each rotation.

The assessment of the research project will be based on a dissertation and a poster presentation.

Research Methodology (**PHTH E37073**), Research Project and Poster (**PHTH E48156**) will be conducted and assessed as group assignments. Each group will be comprised of two (02) students. The mark allocation for assessment will be as follows.

PHTH E37073 (Core) Research Methodology		PHTH E48156 (Core) Research project and poster	
Research Proposal (Proposal presentation Viva)	Individual mark - 40%	Research Project Poster and Viva	Individual mark - 50%
	Group mark-20 %		Group mark-50%
Research Proposal (Written)	Group mark -40%	Research project dissertation	Group mark-100%

5.2 Submission of assignments

Therapists will be notified of the date and time for submitting each piece of coursework on the day the coursework is assigned. Work should be handed to the course secretary and a stamped receipt obtained. In exceptional cases, an extension maybe given but this should be discussed with the course coordinator in advance of the submission date. Coursework which is submitted late is subjected to the following penalties.

- Handed in up to 24 hours later than set date and time: deduction of 10% of the allocated mark
- Handed in up to 1week later than set date and time: deduction of 20% of the allocated mark

If an assignment is handed in more than a week later than its due date, 30% of the allocated mark will be deducted, but the acceptance of such a piece of coursework is at the discretion of the course coordinator with the covering approval of the Board of Study. The work may not be accepted if the same assignment has already been marked and returned to other Therapists.

5.3 Grading System

Marks obtained in each strand will be graded according to the following grading system.

Range of marks	Grade	Grade Point
85-100	A+	4.00
70-84	A	4.00
65-69	A-	3.70
60-64	B+	3.30
55-59	B	3.00
50-54	B-	2.70
45-49	C+	2.30
40-44	C	2.00
35-39	C-	1.70
30-34	D+	1.30
25-29	D	1.00
00-24	E	0.00

5.4 Re-sit examinations and Progression requirements

The pass mark is 40%. Therapists will be required to pass all strands to graduate. A therapist who has obtained a Grade of C- or lower for a component of the assessment will have to resit that component. In strands where there is more than one assessment component, if a therapist obtains an E Grade (<25%) for one component of the assessment, they are required to retake the entire strand in order to graduate from the programme. In exceptional circumstances, a therapist may be allowed to graduate with one condoned fail strand.

In the final calculation for degree classification, all re-sits due to failure at the first attempt or missed first attempt due to an invalid reason (as deemed by the board of study) will not be given (in the calculation) more than 40 marks or C grade. A student who has failed at the first attempt or missed the first attempt due to an invalid reason (as deemed by the board of study) will not be awarded a first-class or a second upper class, despite being eligible based on the cumulative GPA.

5.5 Grade Point Average

Grade Point Average (GPA) is the credit weighted arithmetic mean of the Grade Point Values, which is determined by dividing the total credit-weighted Grade Point Value by the total number of credits. For example, if the therapist completed one strand with two credits, three strands of 3 credits each, two strands of one credit each with Grades A, C, B, D, E, and A+ respectively, (s)he would have a GPA of,

$$= \frac{(2 \times 4.0) + (3 \times 2.0) + (3 \times 3.0) + (3 \times 1.0) + (1 \times 0.0) + (1 \times 4.0)}{2+3+3+3+1+1}$$

$$= \frac{30.0}{13} = 2.308 = 2.31$$

GPA shall be computed to the second decimal place, based on 60 credits for the upgrade programme.

The final GPA will not include course work completed during the Diploma programme.

5.6 Academic Misconduct

Therapists must conduct their studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is academic misconduct, for which the University may penalise a therapist. Specifically it is academic misconduct for a therapist to:

- present copied, falsified or improperly obtained data as if it were the result of their own research, clinical work or other investigatory work;
- include in their work material that is the result of significant assistance from another person if that assistance was unacceptable according to the instructions or guidelines for that work;
- assist another student in the presentation of that student's individual work in a way that is unacceptable according to the instructions or guidelines for that work;
- cheat (dishonest conduct in assessment);
- Plagiarise (knowingly present the work or property of another person as if it were one's own.)

6. CRITERIA FOR DEGREE CLASSIFICATION

Upon completing the prescribed programme of study, practising therapists must handover their Diploma in Physiotherapy certificate to the University of Kelaniya, before they can be awarded the degree of Bachelor of Science (Physiotherapy).

6.1 Eligibility for the award of Bachelor of Science in Physiotherapy degree

To be eligible for the award of the BScPT degree (Level 6 of the Sri Lanka Qualification Framework 212), a practising therapist must have

1. Accumulated 120 credits (60 credits under general exemption and 60 credits to be accumulated during the programme).
2. Obtained at least a C grade in each course unit
3. Obtained a minimum GPA of 2.00
4. Should complete the requirements for awarding the degree within six (06) years of registration.

6.2 Award of Honours

6.2.1 First Class Honours

1. Completed the relevant upgrade requirements,
2. Obtained at least B- grade in each course unit,
3. Obtained 'A' grade or better in more than **50%** of the total number of credits offered in BScPT course, and
4. Obtained a minimum GPA of 3.70

6.2.2 Second Class (Upper division)

1. Completed the relevant upgrade requirements,
2. Obtained 'B' grade or better in more than **50%** of the total number of credits offered in the BScPT course, and
3. Obtained a minimum GPA of 3.30

6.2.3 Second (lower division)

1. Completed the relevant upgrade requirements,
2. Obtained 'B' grade or better in more than **40%** of the total number of credits offered in the BScPT course, and
3. Obtained a minimum GPA of 3.00

