



Faculty of Physical Therapy
SRINAKHARINWIROT UNIVERSITY

Doctor of Philosophy (Ph.D.) in Physical Therapy



Faculty of Physical Therapy
Srinakharinwirot University



Program Specification

Doctor of Philosophy (Ph.D.) in Physical Therapy

1. Program Name

Doctor of Philosophy (Ph.D.) in Physical Therapy

2. Final Award

Doctor of Philosophy (Physical Therapy)

3. Program Code

25520091100828

4. Awarding Institute

Srinakharinwirot University

5. Teaching Institute

Faculty of Physical Therapy

6. Mode/ type of study

Full time, online based study

2 Plan of study; Plan 2.1 (Master admission) and Plan 2.2 (Bachelor admission)

7. Language

Thai (speaking)

English (speaking, learning and reading materials)

8. Study duration

Plan 2.1: Minimum 3 years, Maximum 5 years

Plan 2.2: Minimum 4 years, Maximum 7 years

9. Entry requirement

Plan 2.1

- ☐ Having Master degree in Physical Therapy or other related degree and active physical therapy license

Plan 2.2

- ☐ Having Bachelor degree in Physical Therapy (GPA 3.5 or over) and active physical therapy license

10. Program Philosophy

Building the body of knowledge and innovations in physical therapy for highly effective population health and wellness

11. Program objectives

The objectives of this program are to:

- 10.1 create innovation or body of knowledge in physical therapy in accord with research ethics
- 10.2 synthesize evidence-based practice in health care for efficiently support an aging society based on consideration of professional ethics
- 10.3 efficiently engage in international academic communication

12. Reference points used to inform the program specification

- ☐ Srinakharinwirot University, Graduate School website
<https://www.swu.ac.th/>
- ☐ Faculty of Physical Therapy, Srinakharinwirot University website
<http://healthsci.swu.ac.th/>

13. Program learning outcomes (ELO)

	Intended Learning Outcomes	Teaching and Learning Methods	Assessment
ELO1	Conduct physical therapy research and apply the knowledge to professional problem-solving	Lectures, laboratory, group discussion, seminar, self-learning, assign work, research-based learning, clinical practice, online course	Progress report, self-evaluation, observation, publication, clinical practice, clinical presentation, case reports
ELO2	Create innovation or body of knowledge in physical therapy in accord with research ethics	Lectures, laboratory, group discussion, seminar, self-learning, assign work, research-based learning, online course	Progress report, self-evaluation, observation, publication
ELO3	Systematically synthesize data pertaining to health care service	Lectures, laboratory, group discussion, seminar, self-learning, assign work, research-based learning, evidence-based learning, clinical practice in health care and community	Case presentation, assignment, case reports, classroom assessment, research, ethics in research, clinical practice



ELO4	Apply evidence-based practice in health care service based on professional ethics	Lectures, laboratory, group discussion, seminar, self-learning, assign work, research-based learning, evidence-based learning, clinical practice in health care and community	Presentation and demonstration, case presentation, assignment, case reports, clinical practice
ELO5	Effectively present and exchange academic points of view	Group discussion, seminar, assign work, research-based learning, case study	Case presentation, assignment, case reports, classroom assessment, research, ethics in research, clinical practice
ELO6	Present research work at the international platform	Oral presentation, academic writing training	International publication, presentation at international conferences

14. Graduation Requirements

- ☐ Completion of all credits required in the program
- ☐ Average GPA equals 3.00 (in the 4.00 system) and average grade of 3.00 in the required courses.
- ☐ Pass the proposal exam
- ☐ Pass the Qualifying exam
- ☐ Pass the thesis defense
- ☐ Pass the English proficiency test
- ☐ Complete the soft skill requirement
- ☐ Having one international research publication

15. Indications of program quality

- ☐ University Academic Review
- ☐ Yearly review from the Office of Higher Education Administration
- ☐ Accreditation from local organizational body based on the Asean University Network Quality Assurance (AUNQA)

16. Total credits:

Description	Plan 2.1 (credits)	Plan 2.2 (credits)
Required course	9	15
Electives	3	9
Thesis	36	48
Total	48	72

17. Program structure

17.1 Plan 2.1

Year 1					
	Semester 1	Credit		Semester 2	Credit
PTX701	Seminar for Clinical Research	3(2-2-5)	PTX703	Integrated Evidence-based Practice	4(1-6-5)
PTX702	Advanced statistics and Application in Research Tools for Physical Therapy	2(1-2-3)	GRD891	Thesis	3
Elective course	Elective course 1	3			
	Total credits	8		Total credits	7
Year 2					
	Semester 1	Credit		Semester 2	Credit
GRT891, QUA900	Thesis, Qualifying examination	6	GRT891	Thesis	9
	Total credits	6		Total credits	9
Year 3					
	Semester 1	Credit		Semester 2	Credit
GRT891	Thesis	9	GRT891	Thesis	9
	Total credits	9		Total credits	9

17.2 Plan 2.2

Year 1					
	Semester 1	Credit		Semester 2	Credit
PTX701	Seminar for Clinical Research	3(2-2-5)	PTX702	Advanced statistics and Application in Research Tools for Physical Therapy	2(1-2-3)
PTX502	Design and Statistics for Physical Therapy Research	3(2-2-5)	PTX703	Integrated Evidence-based Practice	4(1-6-5)
PTX504	Geriatric Physical Therapy	3(3-0-6)	Electives	Elective course 2	3
Electives	Elective course 1	3	Elective	Elective course 3	3
	Total credits	12		Total credits	12

Year 2					
	Semester 1	Credit		Semester 2	Credit
GRT892, QUA900	Thesis, Qualifying examination	6	GRT892	Thesis	6
	Total credits	6		Total credits	6
Year 3					
	Semester 1	Credit		Semester 2	Credit
GRT892	Thesis	6	GRT892	Thesis	6
	Total credits	6		Total credits	6
Year 4					
	Semester 1	Credit		Semester 2	Credit
GRT892	Thesis	12	GRT892	Thesis	12
	Total credits	12		Total credits	12

18. Mapping of Program Learning Outcomes to Courses

Courses	Program Learning Outcome Level of learning (A = apply and analysis E = evaluate, C = create)					
	ELO 1	ELO 2	ELO 3	ELO 4	ELO 5	ELO 6
Required Courses						
PTX 502 Design and Statistics for Physical Therapy Research 3(2-2-5)	A				A	
PTX 504 Geriatric Physical Therapy 3(3-0-6)				A		
PTX 701 Seminar for Clinical Research 3 (2-2-5)	A/E	A			A	A
PTX 702 Advanced statistics for Physical Therapy research 2 (1-2-3)	A/E	A		A		
PTX 703 Integrated Evidence-based Practice 4 (1-6-5)	A/E		E	A/E	A	
Thesis						
GRD 891 Dissertation/ GRD 892 Dissertation	A	E/C	E			A
Electives						
PTX 615 Advanced Management for Geriatric 3 (2-2-5)				A		
PTX 616 Manual and Movement Therapy 3(1-4-4)				A		
PTX 621 Systematic Review and Meta-Analysis 2(1-2-3)				A		
PTX 622 Clinical Biomechanics 3(2-2-5)				A		
PTX 623# A Primer on Pain for Practicing Physical Therapy 3(3-0-6)				A		
PTX 624# Medical Imaging in Rehabilitation 3(3-0-6)				A		

Courses	Program Learning Outcome Level of learning (A = apply and analysis E = evaluate, C = create)					
	ELO 1	ELO 2	ELO 3	ELO 4	ELO 5	ELO 6
PTX 625# Screening of Medical Disorders for Physical Therapy 3(3-0-6)				A		
PTX 627# Clinical Reasoning in Manual Therapy 3(3-0-6)				A		
PTX 628# Innovation in Physical Therapy 2(2-0-4)				A		
PTX 629# Leadership strategy to develop innovative physical therapy practice 3(3-0-6)				A		
PTX 630# Business and Marketing for Physical Therapy 3(3-0-6)				A		
PTX 631# Population Health and Wellness 3(3-0-6)				A		
PTX 711 Current and Specialized Topics in Physical Therapy 3(1-4-4)				A		
# Elective courses conducted by Rehab Essentials, Inc, a partnership with the University of Montana, USA and the Faculty of Physical Therapy, Srinakharinwirot University.						

Course Descriptions

Required Courses

PTX 502 Design and Statistics for Physical Therapy Research

3 (2-2-5)

The design and planning of research methods, along with data analysis and the selection and application of clinical research tools in accord with the principles of research ethics

PTX 504 Geriatric Physical Therapy

3 (3-0-6)

Current thinking on health care for the elderly via physical therapy; understanding the physical and psychological deterioration among the elderly; assessing factors affecting patients' everyday activities; physical therapy management

PTX 701 Seminar for Clinical Research

3 (2-2-5)

A seminar focusing on the interpretation of research; literature reviews; the study of theories and concepts from literature reviews; articulating and pursuing essential clinical research questions; filling out scholarship applications; enhancing your international academic communication skills

PTX 702 Advanced Statistics and Applications of Research Tools for Physical Therapy

2 (1-2-3)

Data management, advanced statistical data analysis, multiple correlations, multiple-regression analysis, composition analysis, multiple-variance analysis, and the design and application of clinical research tools based on research ethics

PTX 703 Integrated, Evidence-Based Practices

4 (1-6-5)

Clinical problem analysis; empirical evidence data searches; research-quality analysis; thinking-process development and guidelines concerning empirical evidence and the sciences related to physical therapy; professional-skills practice; communication and exchange on systematically analyzed academic points of view regarding public health care

Electives

Clinical Skills Groups

PTX 611 Sports Physical Therapy

3 (1-4-4)

Modern concepts and principles; the application of physical therapy techniques for athletes; principles for evaluating athletes' readiness to compete after injuries; professional requirements pertaining to such physical therapy; rules and regulations for such therapists; applying such therapeutic principles to the elderly

PTX 612 Advanced Neurological Physical Therapy

3 (1-4-4)

Neurological modifications from pathology; deterioration with age; physical examination techniques and care for patients with balance problems due to inner ear pathology and for neurological patients with complicated problems; development of the analytical thinking process; integrating and developing evidence-based physical therapy skills

PTX 613 Advanced Cardiovascular and Respiratory Physical Therapy

3 (1-4-4)

Advances in theory and research on principles of the assessment, treatment, rehabilitation, and prevention of recurrence among patients with cardiovascular and respiratory conditions in general; crises; the application of evidence-based knowledge for care; the design of exercise programs; age-appropriate rehabilitation; tracking technology for physiological changes in the cardiovascular and respiratory system

PTX 614 Advanced Physical Therapy in Pediatrics

3 (2-2-5)

Criteria for the selection and use of standardized tests; selection and use of standardized tests; promotion of the quality of life of children; applying evidence-based knowledge, critical thinking, and physical therapy management skills in pediatrics

PTX 615 Advanced Management for Geriatric Patients

3 (2-2-5)

Assessment, ad-hoc problem-solving for geriatric care; development of analytical thinking processes; setting up mock problems and identifying the goals of treatment; integrating and developing physical therapy skills for elderly care and evidence-based palliative care for terminal-phase patients; working in multidisciplinary teams during the terminal phase of elderly care

PTX 616 Manual and Movement Therapy

3 (1-4-4)

Principles for developing manual and movement skills; specific techniques; advances in research and development regarding the analytical thinking process; assessment and treatment of the working-age population and the elderly

Clinical Decision Groups

PTX 617 Motor Control and Motor Learning

3 (2-2-5)

The motor-control processes; the analysis, integration, and application of theoretical research; theories; motor control and motor learning in the development of motor capability

PTX 618 Clinical Exercise Physiology

3 (1-4-4)

Exercise physiology; clinical reasons for exercising; capability promotion among patients and the elderly in general who have circulatory, respiratory, musculoskeletal-system, metabolic-system, and nervous-system conditions

PTX 619 Selected Topics for Research

1 (0-2-1)

Practical learning management skills; selection from empirical evidence, area experts, and other knowledgeable locals; organizing self-study systems in preparation for conducting research

PTX 620 Selected Topics in Physical Therapy Research

3 (1-4-4)

In-depth study of research-design issues, statistics, assessment, measurements in physical therapy, and advances in research methods under the supervision of experts

PTX 621 Systematic Review and Meta-Analysis

2 (1-2-3)

Systematic literature review, data extraction, research- quality assessment, meta-analysis, report writing based on systematic literature reviews and proper meta-analysis procedures

PTX 622 Clinical Biomechanics

3 (2-2-5)

Applied clinical biomechanics of basic elements; the functions of the musculoskeletal system; analysis of abnormal movements; advances in biomechanics related to physical therapy

PTX 623 A Primer on Pain for Practicing Physical Therapy

3 (3-0-6)

The causes, mechanisms, and theories regarding pain; the influence of psychology; the assessment, diagnosis, and treatment of physical therapy patients with chronic pain

PTX 624 Medical Imaging in Rehabilitation**3 (3-0-6)**

Interpretation of medical images of various systems, especially the musculoskeletal ones; assessment, diagnosis, and treatment planning; applications in rehabilitation that work for medical personnel

PTX 625 Screening of Medical Disorders for Physical Therapy**3 (3-0-6)**

Guidelines on screening and clinical reasoning required for effective data collection and patient evaluation; communicating with patients and medical personnel; applying medical screening principles; clinical decision-making in case studies

PTX 626 Pharmacology in Rehabilitation**3 (3-0-6)**

Basic pharmacokinetics, pharmacodynamics, and physiology and the mechanisms of the actions of drugs; the types of medications, based on disorders or conditions; general therapeutic effects; the benefits of medicines; the side effects of drugs vis a vis patients' rehabilitation

PTX 627 Clinical Reasoning in Manual Therapy**3 (3-0-6)**

Clinical reasoning in manual therapy and exercising techniques that support clinical experience, along with logical and critical thinking related to effective treatment

Management Groups**PTX 628 Innovations in Physical Therapy****2 (2-0-4)**

Basic elements; concepts regarding information for more innovative and successful leadership in physical therapy; data analysis and conclusions; advocating for public health care benefits

PTX 629 Leadership Strategies to Develop Innovative Physical Therapy Practices**3 (3-0-6)**

Leadership development; strategies for creating positive changes; improvements in value and the quality of outcomes in clinical practice; recognition-building; collaboration; conflict management; changes making for health system

PTX 630 Business and Marketing for Physical Therapy**3 (3-0-6)**

Fundamentals and applications, economics principles, marketing, business administration, value and success in the physical therapy business

PTX 631 Population Health and Wellness**3 (3-0-6)**

Economic losses from population health problems; risky behavior that causes physical and mental health problems in both children and adults; compiling essential knowledge and creating solutions

PTX 711 Current and Specialized Topics in Physical Therapy

3 (1-4-4)

Research and in-depth critiques of relevant problems; a knowledge of academic physical therapy and the latest innovations; alternative problem solving; innovations and applications for practical knowledge