



Faculty of Physical Therapy
SRINAKHARINWIROT UNIVERSITY

Master of Science (M.Sc.) in Physical Therapy



Faculty of Physical Therapy
Srinakharinwirot University

Program Specification

Master of Science (M.Sc.) in Physical Therapy

- 1. Program Name**
Master of Science (M.Sc.) in Physical Therapy
- 2. Final Award**
Master of Science (Physical Therapy)
- 3. Program Code**
25520091100874
- 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 A2 (thesis) and Plan B (Special project)
- 7. Language**
Thai (speaking)
English (speaking, learning and reading materials)
- 8. Study duration**
Minimum: 2 years (4 semesters)
Maximum: 4 years
- 9. Entry requirement**
 - ☐ Having Bachelor degree in Physical Therapy and active physical therapy license or
 - ☐ Physical Therapy students in the 4+1 program
- 10. Program Philosophy**
Research and improvement of body of knowledge to professional development for population health and wellness
- 11. Program objectives**
The objectives of this program are to:
 - 11.1 apply the body of knowledge and to pursue research on physical therapy for professional development.
 - 11.2 analyze clinical evidence in health care for efficiently support an aging society based on consideration of professional ethics.
 - 11.3 efficiently make academic communication.

12. Reference points used to inform the program specification

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

13. Expected learning outcomes (ELO)

	Intended Learning Outcomes	Teaching and Learning Methods	Assessment
ELO1	Conduct physical therapy research	Lectures, laboratory, group discussion, seminar, self-learning, assign work, research-based learning, online course	Progress report, self-evaluation, observation, publication
ELO2	Apply the body of knowledge for professional development	Lectures, laboratory, group discussion, seminar, self-learning, assign work, problem-based learning, case study, clinical practice in health care and community	Presentation and demonstration, case presentation, assignment, case reports, clinical practice
ELO3	Analyze clinical evidence in health care for efficiently support an aging society	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
ELO4	Demonstrate professional ethics	Group discussion, seminar, assign work, research-based learning, case study	Case presentation, assignment, case reports, classroom assessment, research, ethics in research, clinical practice
ELO5	Effectively present and exchange academic points of view	Group discussion, seminar, web board, assign work, presentation	Case presentation, assignment, case reports, research presentation, clinical practice

14. Graduation Requirements

- ☐ Completion of 36 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 thesis defense
- ☐ Pass the English proficiency test
- ☐ Research requirement
 - For Plan A2: 1 published research paper
 - For plan B: pass the comprehensive exam and finish thesis

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: 36 credits

Description	Plan A2	Plan B
Required course	12	12
Electives	12	18
Thesis	12	-
Special Project	-	6

17. Program structure

17.1 Plan A

Year 1					
	Semester 1	Credit		Semester 2	Credit
PTX501	Applied Research	2(1-2-3)	PTX503	Evidence-Based Practice	4(1-6-5)
PTX502	Design and Statistics for Physical Therapy Research	3(2-2-5)	Elective courses	Elective course 2	3
PTX504	Geriatric Physical Therapy	3(3-0-6)		Elective course 3	3
Elective course	Elective course 1	3	GRT691	Thesis	3
	Total credits	11		Total credits	13
Year 2					
	Semester 1	Credit		Semester 2	Credit
GRT691	Thesis	3	GRT691	Thesis	6
Elective course	Elective course 4	3			
	Total credits	6		Total credits	6

17.2 Plan B

Year 1					
	Semester 1	Credit		Semester 2	Credit
PTX501	Applied Research	2(1-2-3)	PTX503	Evidence-Based Practice	4(1-6-5)
PTX502	Design and Statistics for Physical Therapy Research	3(2-2-5)	Elective courses	Elective course 2	3
PTX504	Geriatric Physical Therapy	3(3-0-6)		Elective course 3	3
Elective course	Elective course 1	3		Elective course 4	3
	Total credits	11		Total credits	13
Year 2					
	Semester 1	Credit		Semester 2	Credit
GRI 681	Independent study	3	GRI 681	Independent study	3
Elective course	Elective course 5	3		Elective course 6	3
	Total credits	6		Total credits	6

18. Mapping of Program Learning Outcomes to Courses

Courses	Program Learning Outcome (PLO) (level of learning: A = apply and analyse, E = evaluate)				
	ELO 1	ELO 2	ELO 3	ELO 4	ELO 5
Required courses					
PTX 501 Applied Research for Physical Therapy	A	A			A
PTX 502 Design and Statistics for Physical Therapy Research 3(2-2-5)	A			A	

Courses	Program Learning Outcome (PLO) (level of learning: A = apply and analyse, E = evaluate)				
	ELO 1	ELO 2	ELO 3	ELO 4	ELO 5
PTX 503 Evidence-Based Practice 4(1-6-5)	A	A	A/E	A	A
PTX 504 Geriatric Physical Therapy 3(3-0-6)			A		
Thesis/ Independent study					
GRT 691 Thesis, GRI 681 Independent Study	A	A			A
Electives					
Clinical Skills Group					
PTX 611 Sport Physical Therapy 3(1-4-4)			A		
PTX 612 Advanced Neurological Physical Therapy 3(1-4-4)			A		
PTX 613 Advanced Cardiovascular Respiratory Physical Therapy 3(1-4-4)			A		
PTX 614 Advanced Physical Therapy in Paediatrics 3(2-2-5)			A		
PTX 615* Advanced Management for Geriatric 3(2-2-5)			A		
PTX 616* Manual and Movement Therapy 3(1-4-4)			A		
Clinical Decision Group					
PTX 617 Motor Control and Motor Learning 3(2-2-5)			A		
PTX618 Clinical Exercise Physiology 3(1-4-4)			A		
PTX 619 Selected Topics for Research 1(0-2-1)			A		
PTX 620 Selected Topics in Physical Therapy Research 3(1-4-4)			A		
PTX 621 Systematic Review and Meta-Analysis 3(2-2-5)			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		
PTX 625# Screening of Medical Disorders for Physical Therapy 3(3-0-6)			A		
PTX 626# Pharmacology in Rehabilitation 3(3-0-6)			A		
PTX 627# Clinical Reasoning in Manual Therapy 3(3-0-6)			A		
MCI 512 Integrated Media for Health Communication 3(1-4-4)			A		
Management Group					
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		
<p>* Courses in the elective category of a program for Doctor of Philosophy in Physical Therapy that master's degree students can enrol. The evaluation will be based on the learning standard at the doctoral level. Physical Therapy</p> <p># Elective courses conducted by Rehab Essentials, Inc, a partnership with the University of Montana, USA and the Faculty of Physical Therapy, Srinakharinwirot University.</p>					

Course Descriptions

Required Courses

PTX 501 Applied Research 2 (1-2-3)

Data searches; analytical research reading; literature reviews; the study of theories and concepts from literature reviews; effective research questions or research problems development for applied research and academic communication

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 503 Evidence-Based Practice 4 (1-6-5)

Setting up mock clinical problems, evidence-based data searches, research-quality assessments, clinical-evidence analyses, thinking-process development, professional skills practice, presentation of patients' reports, and a systematic exchange of analyzed academic ideas regarding public health care

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

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

MCI 512 Integrated Media for Health Communication

3 (1-4-4)

Study of concepts; media-use analysis and integrated media applications responding to creative work toward setting goals; conceptual integration; integrated media-selection practices; a study of the advantages and disadvantages of using media; effective media creation and presentation of data, information, and health knowledge