

Physical Therapy

Helen Z. Cornely, *Associate Professor and Chair*

Steven Bernstein, *Clinical Assistant Professor*

Leonard Elbaum, *Associate Professor*

Lori Gusman, *Clinical Assistant Professor & Director of Clinical Education*

Awilda R. Haskins, *Associate Professor*

Lisa Roberts, *Assistant Professor*

Colleen Rose-St. Prix, *Associate Professor*

Mark Rossi, *Assistant Professor*

About the Department

The Department of Physical Therapy is part of the **School of Health Sciences**, which in turn is a part of the **College of Health and Urban Affairs**.

The Mission of the Physical Therapy Department is to meet the physical therapy needs of the local, state, national, and international community by:

- providing masters level physical therapy education,
- advancing the knowledge base of physical therapy,
- developing innovative model physical therapy service programs, and,
- providing ethnically diverse physical therapy practitioners poised to help eliminate health disparities by providing culturally competent health care.

Our curriculum is accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE), and has been since its inception in 1975, allowing graduates of the program to apply for licensure as Physical Therapists throughout the United States. The 25-year licensure examination pass rate is over 95%.

The department occupies over 6,000 square feet of offices and laboratories on the University Park Campus of FIU. It moved to the new Health and Life Sciences building when it opened in Fall of 2002. The departmental inventory includes the full range of clinical equipment used by practicing physical therapists, and is continually updating equipment to support faculty and student research projects. The Kinesiology Laboratory houses several state of the art computer systems with the capability to analyze human movement with high speed digital video, force sensors, and surface electromyography.

There are 8 full-time faculty members, and numerous adjunct faculty. Collectively, the faculty possess well over 100 years of teaching, research, and clinical experience.

The clinical and research interests of the faculty range from pediatrics to geriatrics, and from neuroscience to biomechanics. Several faculty members specialize in the impact of social, psychological, and cultural factors on health care delivery and education.

The faculty prides itself on its intellectual, cultural, racial, and ethnic diversity. There are approximately 150 students in the department, including graduate students in the Professional Preparation (Entry-level) Master of Science Program, and the Post-professional (Advanced) Program, and special students.

The curriculum features a progressive, problem-oriented approach and includes rigorous coverage of the full range of basic medical sciences, clinical sciences, and hands-on skills relevant to the practice of physical therapy, now and in the future.

Academic Programs

The department currently offers two different degree programs.

- Professional Preparation (Entry-level) Master of Science in Physical Therapy
- Post-Professional Master of Science in Physical Therapy

A high school student, or a college student who has not yet earned an undergraduate degree, should consider the Bachelor of Health Science, Pre-Physical Therapy Track offered in the School of Health Sciences. Please refer to the School of Health Sciences section of the undergraduate catalog for further information on the Pre-Physical Therapy Track Bachelor of Health Sciences.

Professional Preparation (Entry-level) Master of Science in Physical Therapy

About the program

This program is designed for those who already possess a bachelor's degree, and who wish to become practicing physical therapists. Applicants who do not have a bachelor's degree, might be interested in the Bachelor of Health Sciences-Pre- Physical Therapy Track housed in the School of Health Sciences.

The Master of Science in Physical Therapy program is rigorous, and is recommended only for highly motivated students with proven records of success as undergraduates.

Upon completion of this program, students will earn a Master of Science (MS) degree, and will be eligible to apply for licensure as a Physical Therapist anywhere in the United States and several other jurisdictions.

The program of studies includes 81 credits of didactic and laboratory training. It is designed for full-time students, and requires 7 consecutive semesters of full-time study. Admission to the program is limited to approximately 48 students per year.

Requirements:

- A GPA of 3.0 in the last 60 hours of the undergraduate coursework.
- **Completion of the following prerequisites courses:**

Chemistry with laboratories	8-10
Developmental Psychology	3
General Biology and Lab	4
Human Anatomy**	3
Human Physiology or Exercise Physiology	3
Physics with laboratories	8-10
Psychology	3
Statistics	3

**Three credits are required, but 8 credits (6 Lecture, 2 Laboratory) of Human Anatomy with cadaver dissection highly recommended (eg. ZOO3733, 3733L, 3734 and 3734L at FIU).

- Essay which explains why you want to become a physical therapist and why you are interested in attending FIU.
- A curriculum vitae / resume.
- Admission into FIU as a graduate student.
- A bachelor's degree from an accredited institution.

Three letters of recommendation. These are optional, and are not required.

Admission

Applications will be admitted upon approval from the departmental Graduate Admissions Committee and the University Graduate School.

An applicant who fails to meet the regular admissions criteria may be considered for conditional admissions to the program. To meet admissions standards under the conditional admission, the student must obtain a 3.25 GPA in the first 12 credits or 2 semesters, which ever comes first.

Graduates of non-U.S. institutions must be academically eligible for further study in the country where the degree was earned. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the IBT TOEFL or 6.3 overall on the IELTS is required.

Students must submit a supplemental application directly to the Department in addition to their application for Graduate Admission to FIU. Application and Instructions are available from the departmental office or website: <http://physicaltherapy.fiu.edu>.

Deadlines

Students may begin the program in the Fall term only.

- Students applying to the Fall semester must submit their Physical Therapy Application and University Graduate School application by January 15.
- Applications received after January 15 will be considered on a space available basis only. Please note the Department of Physical Therapy has limited capacity.
- The Admissions committee decisions will be made on or about March 15.

Program of Studies

Fall Semester 1

PHT 5174	Analysis of Movement and Function	3
PHT 5174L	Analysis of Movement and Function Lab	1
PHT 5523	Dimensions of Professional Practice Seminar I	3
PHT 5205	Clinical Skills	3
PHT 5205L	Clinical Skills Lab	1
ZOO 5371	Applied Musculoskeletal Systems	3
ZOO 5371L	Applied Musculoskeletal Systems Lab	1

Spring Semester 1

PHT 5027	Clinical Education Seminar	1
PHT 5180	Musculoskeletal Diagnosis and Management I	3
PHT 5180L	Musculoskeletal Diagnosis and Management I Lab	1
PHT 5524	Dimensions of Professional Practice Seminar II	3
PHT 6341	Diagnosis and Management of Disease	3
PHT 6341L	Diagnosis and Management of Disease Lab	1

Summer Semester 1

PHT 5181	Musculoskeletal Diagnosis and Management II	3
PHT 5181L	Musculoskeletal Diagnosis and Management II Lab	1
PHT 5505C	Physical Therapy Constructs of Health and Wellness	3
PHT 5960	Comprehensive Exam I	1
PHT 5805	Clinical Internship I	3

Fall Semester 2

PHT 5182	Musculoskeletal Diagnosis and Management III	3
PHT 5182L	Musculoskeletal Diagnosis and Management III Lab	2
PHT 5525	Dimensions of Professional Practice Seminar III	3
PHT 6163	Neurological Diagnosis and Management I	3
PHT 6163L	Neurological Diagnosis and Management I Lab	1

Spring Semester 2

PHT 6164	Neurological Diagnosis and Management II	3
PHT 6164L	Neurological Diagnosis and Management II Lab	1
PHT 6381	Diagnosis and Management of Cardiopulmonary Systems	3
PHT 6381L	Diagnosis and Management of Cardiopulmonary Systems Lab	1
PHT 6817	Clinical Internship II	3

Summer Semester 2

PHT 6169	Neurological Diagnosis and Management III	3
PHT 6169L	Neurological Diagnosis and Management III Lab	1
PHT 6526	Dimensions of Professional Practice Seminar IV	3
PHT 6961	Comprehensive Exam II	1
PHT 6970/1	Master's Project or Thesis	3

Fall Semester 3

PHT 6827	Clinical Internship III	3
PHT 6828	Clinical Internship IV	3
PHT 6970/1	Master's Project or Thesis	3

Post-Professional (Advanced) Masters Degree Program

The Post-professional (Advanced) Master's Degree Program is designed to enable physical therapists to pursue attainment of advanced education and research skills in the area of geriatric physical therapy. This degree is open to those individuals who are licensed physical therapists.

In most cases, physical therapists completing the post-professional master's degree program can simultaneously earn a graduate certificate in gerontology.

The curriculum is comprised of three basic components: gerontology courses designed to increase understanding of the theoretical basis and current issues of physical therapy practice with elders; a research sequence designed to improve the physical therapist's ability to engage in research; and graduate level elective courses which will allow the physical therapist to obtain additional skills and knowledge in the areas of physical therapy and in other areas of interest. The program permits part-time as well as full-time study. The physical therapists that elects to complete the program on a full-time basis can complete the physical therapy coursework in three full semesters. All degree requirements must be completed within six years of the initial admission into the program.

The goals of the program are to:

1. Provide physical therapists with advanced skills for diverse settings.
2. Prepare individuals to apply scientific principle of human movement, including identification, prevention,

assessment and correction of acute or chronic movement dysfunction.

3. Provide physical therapists with advanced skills and knowledge commensurate with the expanding need for health care services.

Requirements for Admission

1. Bachelor's degree in physical therapy or the equivalent from an accredited institution.
2. A minimum grade point average of 3.0 based on a 4.0 scale (upper division).
3. Evidence of graduation from an institution accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE),

or

A transcript evaluation by a credentialing service approved by the Florida Board of Physical Therapy Practice that concludes that the applicant's degree is equivalent to one from a CAPTE-accredited program. To obtain a list of credentialing agencies, contact:

Florida Board of Physical Therapy Practice
4052 Bald Cypress Way
Tallahassee, FL 32399-3255
(850) 245-4373

<http://www.fpta.org/fpta/BoradofPT/agencies.html>.

4. A minimum of three letters of recommendation to include one from each of the following persons: a college or university professor; a physical therapist; a current or past employer.
5. A curriculum vita/resume
6. A summary statement of professional and educational goals and assessment of current professional activities (attached to resume); and
7. A copy of a license to practice physical therapy in the State of Florida or other jurisdiction.

The Curriculum

The Post-professional Master of Science in Physical Therapy consists of 36 credits including thesis or master's project. Fifteen to eighteen credits of graduate level physical therapy courses must be taken. Additional required courses include a minimum six to nine graduate credits of electives, a graduate research course, and a graduate-level statistics course.

Students who complete the BS degree in Physical Therapy at an institution not accredited by CAPTE and whose transcript evaluation identifies one or more deficient content areas may be required to complete additional course work covering the identified content areas.

A maximum of six credits of graduate work may be transferred from other institutions, provided they are approved by the departmental graduate committee, deemed equivalent to program requirements, and in compliance with the University's graduate policies and procedures.

A maximum of 12 credits earned as a non-degree seeking student at the University may be accepted by the program, provided they are approved by the departmental graduate committee, deemed equivalent to program requirements and in compliance with the University's graduate policies and procedures.

The curriculum is described below:

PT Core (9 credits):

PHT 5375	Foundations in Gerontology	3
GEY 5600	Phys. Change and Healthy Aging	3

GEY 5005C	Issues in Gerontology	3
PT Electives (Select 6-9 credits from the following courses):*		
PHT 5254	Disability Awareness	3
PHT 5504	Service Learning in PT	1-3
PHT 5505C	PT Constructs of Health	3
PHT 5523**	Dimensions of Professional Practice I	3
PHT 6905	Independent Study (may be repeated)	3

Research Component (12 credits):

STA 6166	Statistical Methods 1	3
IHS 6509	Quantitative Research Analysis in Health and Urban Affairs I	3
PHT 6970	Master's Project	3
or		
PHT 6971	Master's Thesis	3

Electives (6-9 credits):

Area of Interest	6-9
------------------	-----

**May substitute other courses with permission of advisor.*

***Required for physical therapists with entry level bachelor's degrees from non-CAPTE-accredited PT programs.*

Admissions

Applicants will be admitted upon recommendation from the departmental Graduate Admissions Committee and approval of the University Graduate School.

Graduates of non-U.S. institutions must be academically eligible for further study in the country where the degree was earned. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.3 overall on the IELTS is required.

Students must submit a supplemental application directly to the Department in addition to their application for Graduate Admission to FIU. Application and instructions are available from the departmental office or website.

Deadlines

Applications are accepted throughout the year, and accepted students may begin in any term. See the academic calendar for graduate admissions deadlines.

Course Descriptions

Definition of Prefixes

GEY - Gerontology
PHT - Physical Therapy

GEY 5005C Issues in Gerontology for Health Professions (3). This course examines social, economic, and demographic issues challenging older adults and health care professionals providing services to this age group.

GEY 5600 Physical Change and Healthy Aging (3). Primary health care and wellness with discussion and assessment of normal physiological alterations and their relationship to common health concerns and medical problems of older adults.

PHT 5027 Clinical Education Seminar (1). This course is designed to address prerequisite clinical education issues

that historically contribute to the overall success in the clinical internships. Topics range from use of the evaluation tool to taxonomies of learning. Prerequisites: Admission to Professional PT Curriculum or permission of department.

PHT 5045 Applied Educational Theory in Physical Therapy (3) The application of teaching and learning principles to Physical Therapy patient education, student clinical education, and continuing education. A variety of teaching methodologies will be practiced by participants. Prerequisites: Admission to PT Professional Program or permission of department.

PHT 5174 Analysis of Movement and Function (3). The course is designed to give physical and/or occupational therapy students the cognitive skills necessary to analyze human movement in the context of physical therapy practice. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5174L.

PHT 5174L Analysis of Movement and Function Lab (1). The course is designed to give physical and occupational therapy students the psychomotor skills necessary to analyze human movement in the context of PT practice. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5174.

PHT 5180 Musculoskeletal Diagnosis and Management I (3). This course is designed to prepare the student in the area of physical therapy related musculoskeletal diagnosis and treatment with focus on upper extremities. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5180L.

PHT 5180L Musculoskeletal Diagnosis and Management I Lab (1). This is the laboratory course designed to prepare students for evaluating and treating physical therapy related musculoskeletal diagnosis. Prerequisites: Admission to PT Professional Program or permission of department. Corequisite: PHT 5180.

PHT 5181 Musculoskeletal Diagnosis and Management II (3). This is designed to prepare the student in the area of Physical Therapy related musculoskeletal diagnosis treatment with focus on lower extremities. Prerequisites: PHT 5180, PHT 5180L, PHT 6341, PHT 6341L. Corequisite: PHT 5181L.

PHT 5181L Musculoskeletal Diagnosis and Management II Lab (1). This is a laboratory course designed to prepare students for evaluating and treating physical therapy related musculoskeletal diagnosis. Prerequisites: PHT 5180, PHT 5180L, PHT 6341, PHT 6341L. Corequisite: PHT 5181.

PHT 5182 Musculoskeletal Diagnosis and Management III (3). This course is designed to prepare the student in the area of Physical Therapy related musculoskeletal diagnosis and treatment with focus on the spine. Prerequisites: PHT 5181 and PHT 5181L. Corequisite: PHT 5182L.

PHT 5182L Musculoskeletal Diagnosis and Management III Lab (2). This is a laboratory course designed to prepare students for evaluating and treating physical therapy related musculoskeletal diagnosis specific

to the spine. Prerequisites: PHT 5181 and PHT 5181L. Corequisite: PHT 5182.

PHT 5205 Clinical Skills (3). Utilizing a seminar format, this course will provide the student with the theory and practice of necessary and basic physical therapy clinical skills. Prerequisites: Admission to the PT Program or permission of instructor. Corequisites: PHT 5174 and PHT 5174L.

PHT 5205L Clinical Skills Lab (1). Utilizing a laboratory format, this course will provide the student with the theory and practice of necessary and basic physical therapy clinical skills. Prerequisites: Admission to the PT Program or permission of instructor. Corequisite: PHT 5205, Clinical Skills.

PHT 5218 Physical Agent Modalities for Non-Physical Therapy Majors (1). The course is an introduction to physical agent modalities in rehabilitation for students and practitioners of occupational therapy, athletic training, massage therapy or other health care professions.

PHT 5254 Disability Awareness Through Aquatic Sports (3). Designed for disabled and non-disabled persons to learn life long sports in an interactive format cumulating in weekend sailing and camping trip. Participants will learn the difficulties and methods to facilitate sports for disabled persons.

PHT 5323C Pediatric Physical Therapy (3). Entry-level, skills and competencies in pediatrics, including motor development; diagnosis, examination and intervention; and family, health education, and service delivery issues. Prerequisites: Admission into the graduate program in PT or permission on instructor.

PHT 5328 Advanced Pediatric Physical Therapy Assessment (3). Analysis of assessment tools in relation to treatment. Competence in administration of appropriate tools will be required at end of course. Prerequisites: Either STA 5126 or STA 6166 and permission of the instructor.

PHT 5335 Physical Therapy in Obstetrics/Gynecology (3). This course will explore the role of the therapist in the field of obstetrics and provide an introduction to gynecological issues. Emphasis will be on evaluation and treatment of the OB client. Prerequisite: Permission of the instructor.

PHT 5336 Theories in Cardiopulmonary Rehabilitation (3). This course is designed to provide students with applied theory in the clinical and physical therapy management of medical and surgical cardiac and respiratory conditions. Prerequisite: Permission of the instructor.

PHT 5373 Advanced Therapy Assessment of the Elderly (3). The study of assessment tools used in geriatric rehabilitation in relation to appropriate intervention strategies and research findings. Prerequisites: Appropriate adult motor development course/permission of major advisor.

PHT 5375 Foundations in Gerontology for Health Professions (3). Implications for health professions of the biological, cross-cultural, physiological, psychological, social, and societal context's of aging.

PHT 5504 Service Learning in Physical Therapy (1-3).

The course includes a brief introduction to community service in Physical Therapy, an opportunity to assist professionals to deliver community-based physical therapy services, and the preparation of case studies based on the students's experiences. Prerequisites: Advanced standing in the undergraduate PT program or admission to Graduate PT program.

PHT 5505C Physical Therapy Constructs in Health and Wellness (3). Covers elements of Physical Therapy related prevention, screening, health and wellness for individuals, schools, and communities.

PHT 5515 Therapeutic Services for Physically Impaired and Mentally Retarded Students (3). Lecture, lab, and group work to develop skills of education and therapy professionals for implementation with disabled children in schools. Prerequisite: Permission of major advisor or instructor.

PHT 5523 Dimensions of Professional Practice Seminar I (3). This is the first in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: Admission to Professional PT Curriculum.

PHT 5524 Dimensions of Professional Practice Seminar II (3). This is the second in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: PHT 5523.

PHT 5525 Dimensions of Professional Practice Seminar III (3). This is the third in a sequence of four (4) courses designed to prepare the student in the areas of physical therapy related research, administration, education and professional issues. Prerequisite: PHT 5524.

PHT 5639 Physical Therapy Administrative Techniques and Methods (3). Provides an in-depth view of the health care industry and its relationship to the P.T. profession. Management techniques in all areas will be presented with emphasis on planning and financial management.

PHT 5805 Clinical Internship I (3). This is the first in a sequence of 4 supervised full-time clinical internships designed to offer the student experiences in patient evaluation and care with emphasis on musculoskeletal dysfunction. Prerequisite: PHT 5960.

PHT 5815 Clerkship in Physical Therapy (2). Two-week full-time clinical experience combined with independent study of question or issue in clinical Physical Therapy. Prerequisite: Permission of major advisor.

PHT 5823 Internship (3). Supervised, full-time clinical experience, designed to offer the student experience in patient evaluation and care, particularly in the areas of rehabilitation and neurorehabilitation. Prerequisite: PHT 4933.

PHT 5960 Comprehensive Exam I (1). This is the first of two comprehensive examinations that cover all previously completed coursework and is required for continued progression in the curriculum. Prerequisites: All Fall and Spring Semester Courses-Year I.

PHT 6009 Differential Diagnosis in Physical Therapy (3). This course is designed to enable the physical therapy student to engage in the diagnostic process to establish differential diagnoses for patients across the life span. Prerequisite: PHT 4300.

PHT 6127 Advanced Pathologic Movement Analysis (3). Explores the abnormal gait and movement patterns as they relate to pathologic states involving either the musculoskeletal or the neurologic system, or both. Prerequisite: Permission of major advisor.

PHT 6145 Motor Development: Adult Through Geriatrics (3). A study of motor development of the adult through old age. Application of developmental principles to physical therapy practice and research. Prerequisite: Permission of major advisor.

PHT 6163 Neurological Diagnosis and Management I (3). This is the first in a sequence of three (3) lecture courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 5960 or permission of instructor. Corequisite: PHT 6163L.

PHT 6163L Neurological Diagnosis and Management I Lab (1). This is the first in a sequence of three (3) laboratory courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 5960 or permission of instructor. Corequisite: PHT 6163.

PHT 6164 Neurological Diagnosis and Management II (3). This is the second in a sequence of three (3) lecture courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6163, PHT 6163L. Corequisite: PHT 6164L.

PHT 6164L Neurological Diagnosis and Management II Lab (1). This is the second in a sequence of three (3) laboratory courses designed to prepare the student for psychomotor competencies in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6163, PHT 6163L. Corequisite: PHT 6164.

PHT 6165 Applied Clinical Neuro anatomy (3). Examines correlation of sites of pathology in the central and peripheral nervous systems with actual patients; their signs and symptoms, their regimen of treatment, and prognosis for rehabilitation. Prerequisites: Neuroanatomy and permission of major advisor.

PHT 6169 Neurological Diagnosis and Management III (3). This is the third in a sequence of three (3) lecture courses designed to prepare the student in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6164, PHT 6164L. Corequisite: PHT 6169L.

PHT 6169L Neurological Diagnosis and Management III Lab (1). This is the third in a sequence of three (3) laboratory courses designed to prepare the student for psychomotor competencies in the areas of physical therapy related neurological diagnosis and treatment. Prerequisites: PHT 6164, PHT 6164L. Corequisite: PHT 6169.

PHT 6237 Environments/Energy Expenditures of the Disabled (3). Analysis of the home and work settings in relation to various forms of physical disabilities. Energy expenditures pertaining to environmental factors as they pertain to physical therapy evaluation and treatment. Prerequisite: Permission of major advisor.

PHT 6239 Developmental Disabilities in Adulthood (3). A study of adults with developmental disabilities; including aspects of societal perspectives, political and public policy regarding the handicapped, and current theories in treatment of the handicapped adult population. Prerequisite: Permission of major advisor and instructor.

PHT 6325 Advanced Clinical Pediatric Physical Therapy (3). The study of theory, treatment and current clinical research in pediatric physical therapy practice. Prerequisites: Permission of major advisor and PHT 5320.

PHT 6326 Physical Therapy for At-Risk Infants (3). This course will explore current PT practice and research for at-risk infants in NICU, NCCU, and follow-up programs. Includes aspects of physiological and behavioral monitoring indicators for physical therapy intervention. Prerequisite: PT graduate students.

PHT 6341 Diagnosis and Management of Disease (3). Covers Physical Therapy implications of disease processes, conditions and systemic disorders throughout the lifespan. Prerequisite: All Fall Semester Courses-Year I. Corequisite: PHT 6341L.

PHT 6341L Diagnosis and Management of Disease Lab (1). The practicum portion of PHT 6341 that covers physical therapy intervention in disease processes, conditions, and systemic disorders throughout the life span. Prerequisite: All Fall Semester Courses-Year I. Corequisite: PHT 6341.

PHT 6365 Theories in Sports Physical Therapy (3). Study and exploration of relevant issues in sports physical therapy. Focus on problem identification, investigation, analysis, and problem solving approaches. Prerequisite: Permission of major advisor.

PHT 6381 Diagnosis and Management of Cardiopulmonary Systems (3). This lecture course covers the elements of patient and client management provided by physical therapists with anticipated goals of preferred practice patterns in cardiopulmonary care. Prerequisites: PHT 5205 and PHT 5205L. Corequisite: PHT 6381L.

PHT 6381L Diagnosis and Management of Cardiopulmonary Systems Lab (1). This laboratory course covers the elements of patient and client management provided by physical therapists with anticipated goals of preferred practice patterns in cardiopulmonary care. Prerequisites: PHT 5205 and PHT 5205L. Corequisite: PHT 6381.

PHT 6401 Client-Centered Rehabilitation (3). Utilizes small and large group discussion, multimedia presentations, readings and projects to explore issues of communication, cultural diversity and client-centered rehabilitation.

PHT 6526 Dimensions of Professional Practice Seminar IV (3). This is the fourth in a sequence of four (4) courses designed to prepare the student in the areas of

physical therapy related research, administration, education and professional issues. Prerequisite: PHT 5525.

PHT 6547 Case Management in Physical Therapy (1). Comprehensive physical therapy patient care management and practice review cumulating in a simulated physical therapy licensure examination. Prerequisite: PHT 6705 (Long Term Rehabilitation). Corequisite: PHT 6970 (Master's Project).

PHT 6625 Advanced Physical Therapy Clinical Research Methodologies and Design (3). Exploration of scientific method and theory as applied to clinical and experimental research in physical therapy; includes method of inquiry, techniques of data collection, organization, and interpretation. Prerequisites: STA 5126 or STA 6166 and permission of major advisor.

PHT 6705 Long Term Rehabilitation for Persons with Chronic Disease and Disability (3). Applying long term rehabilitation for persons with chronic disease and disability with focus on the continuum of fitness, health and rehabilitation throughout the life span. Prerequisite: PHT 4711.

PHT 6706 Information and Communication Technology in Rehabilitation (3). An introductory course that focuses on computer rehabilitation technology for clinical practices, research and education, and devices that assist the quality of patient activities. Prerequisite: Student should have a basic understanding of personal computers.

PHT 6714 Spinal Dysfunction I (Lower Back) (3). In-depth exploration of the evaluation and treatment of various lumbar spine dysfunctions. Prerequisite: Permission of major advisor.

PHT 6715 Spinal Dysfunction II (Upper Back) (3). In-depth exploration of the evaluation and treatment of various cervical spine dysfunctions. Prerequisite: Permission of major advisor.

PHT 6716 Theories in Orthopedic Physical Therapy (3). Study and exploration of relevant issues in orthopedic physical therapy. Focus on problem identification, investigation, analysis, and problem solving approaches. Prerequisite: Permission of major advisor.

PHT 6718 Theories in Neurorehabilitation (3). Examines theoretical bases of evaluation and treatment of the neuro-patient; includes exploration of the relationship of motor control and motor learning to current neurologic rehabilitation. Prerequisite: Permission of major advisor.

PHT 6725 Extremity Evaluation and Rehabilitation (3). In-depth exploration, critical analysis, and investigation of joint and extremity dysfunctions. Prerequisite: Permission of major advisor.

PHT 6817 Clinical Internship II (3). This is the second in a sequence of 4 supervised full-time clinical internships designed to offer the student experience in patient evaluation and care with general medical and surgical clients. Prerequisites: PHT 5960, PHT 6164, PHT 6164L.

PHT 6824 Internship I (3). Supervised full-time clinical experience with emphasis on: evidence-based practice; clinical decision making; administration; educational

activities; outcomes assessment; differential diagnosis; and consultation. Prerequisite: PHT 6009.

PHT 6825 Internship II (3). Continuation of PHT 6824, Internship I. Prerequisite: PHT 6824.

PHT 6826 Internship III (3). Continuation of PHT 6825, Internship II. Prerequisite: PHT 6825.

PHT 6827 Clinical Internship III (3). This is the third in a sequence of 4 supervised full-time clinical internships designed to offer the student experience in patient evaluation and care with the neurologically involved client. Prerequisite: PHT 6961.

PHT 6828 Clinical Internship IV (3). This is the final in a sequence of 4 supervised full-time clinical internships designed to offer the student experience in patient care in a speciality setting, including but not limited to pediatrics, SCIP, burns, etc. Prerequisite: PHT 6961.

PHT 6845 Resources and Skills for the PT/PI student (3). This course focuses on the interdisciplinary team that works for the optimum educational benefit of the student. Therapists and teachers will learn and work collaboratively within this course. Corequisites: Graduate OT, PT, or Education students.

PHT 6905 Independent Study (1-3). Individually determined, research-oriented, in-depth study of a physical therapy issue. An independent study contract must be approved by the instructor. Prerequisites: Permission of major advisor and instructor. Must be fully admitted to the graduate program.

PHT 6961 Comprehensive Exam II (1). The second comprehensive examination covering all previously completed coursework and is required for continued progression in the curriculum. Prerequisites: All Fall and Spring Semester Courses-Year II.

PHT 6970 Master's Project (3). An individually supervised project for physical therapy students, who prefer non-thesis option.

PHT 6971 Master's Thesis (3). Supervised research which demonstrates the application of analytical, conceptual and technical skills to a specific physical therapy problem. Prerequisite: Permission of major advisor.