**Physical Therapy DPT Curriculum – Hunter College**

**(Effective Spring 2020)**

**(Includes new course numbering effective Spring 2016 and**

**new course naming effective Spring 2018)**

 **Summer, Year # 1 (8 weeks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class Hours** |
| [PT 70100 Clinical Anatomy](#PT701) | 4 | 6 |
| [PT 70200 Medical Terminology](#PT702) | 1 | 1 Online |
| **Total** | **5** | **7** |

**Fall Semester, Year # 1 (15 wks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class** **Hours** |
| [PT 70300 Foundations of Patient Care](#PT703) | 2 |  4 |
| [PT 70400 Ethical and Psychosocial Dimensions of PT Practice](#PT704)  | 3 |  3 |
| [PT 70600 Upper Extremity Kinesiology & Assessment](#PT706) | 2 |  3 |
| [PT 70700 Research Design and Methods](#PT707) | 3 |  3 |
| [PT 70800 Human Physiology and Exercise Physiology](#PT708) | 5 |  5 |
| [PT 70900 Physical Modalities: Clinical Decision Making & Application](#PT709) | 3 |  4 |
| **Total** | **18** |  **22** |

 **Spring Semester, Year #1 (15 wks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class** **Hours** |
| [PT 74000 PT Prevention & Intervention](#PT740)  | 4 | 6 |
| [PT 75100 Structure and Function of the Nervous System](#PT751) | 3 | 3 |
| [PT 75200 Lower Extremity Kinesiology & Assessment](#PT752) | 2 | 4 |
| [PT 75500 Introduction to Clinical Education](#PT755)   | 1 | 2 |
| [PT 77000 Directed Research I: Critical Inquiry](#PT770) | 1 | 1 |
| [PT 78000 Clinical Medicine for PT](#PT780) | 3 | 3 |
| [PT 79000 Pulmonary Physical T](#PT790)herapy  | 2 | 3 |
| [PT 79500 Integumentary System: Assessment and Intervention](#PT795) | 1 | 2 |
| **Total** | **17** | **24** |

**Summer Semester, Year # 2 (8 weeks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class Hours** |
|  |  |  |
| [PT 809 Directed Research II](#PT809) | 1 | 1 Online |
| **Total** | **1** | **1** |

 **Fall Semester, Year # 2 (9 wks)**

|  |  |  |
| --- | --- | --- |
| Course Name\* = course occurs in the first 9 weeks of the semester | **Credits** | **Class Hours** |
| [PT 80300 Differential Diagnosis & Interventionin Clinical Orthopedics I](#PT803) \* | 2 | 3 |
| [PT 80400 Introduction to Neurological PT \*](#PT804) | 2 | 5 |
| [PT 80500 Musculoskeletal Examination I \*](#PT805) | 3 | 6 |
| [PT 80600 Clinical Experience I (Last 6 weeks of semester)](#PT806) | 3 | 6 wks |
| [PT 80800 Differential Diagnosis in Neurological Evaluation](#PT808) \* | 1 | 3 |
| [PT 80900 Directed Research II: Practicum](#PT809) (Continued from summer) \* | 0 | Hrs. Arr.  |
| [PT 81100 Cardiac Rehabilitation](#PT811) \* | 2 | 5 |
| [PT 81500 Physical Therapy in Acute Care](#PT815) \* | 1 | 3 |
| **Total** | **14** | **25 + 6 wks** |

 **Spring Semester, Year # 2 (15 weeks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class Hours** |
| [PT 80700 Proprioceptive Neuromuscular Facilitation](#PT807) | 1 | 3 |
| [PT 81000 Neurological Interventions I](#PT810) | 3 | 5 |
| [PT 82000 Differential Diagnosis and Intervention in Clinical Orthopaedics II/ Radiology and Imaging](#PT820) | 3 | 3 |
| [PT 83000 Orthotics & Prosthetics](#PT830) | 2 | 2 |
| [PT 84000 Differential Diagnosis & Intervention in Clinical Neurology](#PT840) | 3 | 3 |
| [PT 85000 Musculoskeletal Examination & Intervention II](#PT850) | 3 | 5 |
| [PT 88200 Pediatric Development and Assessment](#PT882) | 2 | 2 |
| [PT 88800 Directed Research III: Presentation Tactics](#PT888) | 1 | 1 |
| **Total** | **18** | **24** |

**Summer, Year # 3 (10 Weeks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class Hours** |
| [PT 88600 Clinical Experience II](#PT886) | 5 | **10 weeks** |
| [PT 88700 Clinical Decision Making](#PT887) | 1 | 1 Online |
| **Total** | **6** | **10 wks** |

**Fall Semester, Year # 3 (15 weeks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class Hours** |
| [PT 83500 Physical Therapy in Geriatrics](#PT835) | 1 | 1 |
| [PT 87000 Health Promotion Through the Lifespan](#PT870) | 2 | 2 |
| [PT 87200 Topics in Physical Therapy](#PT872) | 1 | 2 |
| [PT 88000 Neurological Interventions II](#PT880) | 2 | 4 |
| [PT 88100 Seminar on Departmental Organization & Management](#PT881) | 3 | 3 |
| [PT 88300 Pharmacology for PT & Systems Review](#PT883)  | 3 | 3 |
| [PT 88400 Musculoskeletal Examination and Intervention III](#PT884) | 3 | 5 |
| PT 88500 Electrodiagnosis  | 1 | 1 |
| [PT 895 Directed Research IV: Manuscript Preparation](#PT895) | 1 | 1  |
| **Total** | **17** | **22** |

**Spring Semester, Year # 3 (18 weeks)**

|  |  |  |
| --- | --- | --- |
| **Course Name** | **Credits** | **Class Hours** |
| [PT 889 Clinical Affiliation III](#PT889) | 4.5 | 9 weeks |
| [PT 890 Clinical Experience IV](#PT890)  | 4.5 | 9 weeks  |
| **Total** | **9** | **NA** |

**Credits: 1st year: 40**

 **2nd year: 33**

 **3rd year: 32**

 **TOTAL CREDITS: 105**

**Summary of DPT Graduation Requirements**

* Complete all required coursework as outlined in curriculum table with cumulative GPA at or above 3.0
* Two Professional Development Experiences (no credit) are required. This requirement can be fulfilled through participation in continuing education courses, attending American Physical Therapy Association state and national conferences, presentation of research at state and national conferences, completion of faculty-approved independent study, etc. Courses in different concentrations of PT are recommended.
* Completion of capstone project manuscript and presentation of capstone project to the program faculty and students.

**Course Descriptions - Effective Spring, 2020**

**PT 70100   Clinical Anatomy - 6 hours, 4 credits**
This course is an in depth study of the human body, with emphasis on the neuromuscular and musculoskeletal systems.  Structural interrelationships shall be examined as the basis for normal functions and a means to understand structural and functional dysfunctions. Clinical correlates to physical therapy are examined. Prerequisite: Acceptance into the Physical Therapy Program with completion of all admission requirements.

**PT 70200   Medical Terminology – 1 hour, 1 credit**
This programmed computerized self-study will provide students with the ability to analyze medical terms, define basic terms and abbreviations used in documenting health records and identify common terms related to diagnosis, therapies, and diagnostic tests. Explain the common rules for proper medical term formation, pronouncement and spelling medical terms. Prerequisite: Acceptance into the Physical Therapy Program with completion of all admission requirements.

**PT 70300   Foundations P.T. Care - 4 hours, 2 credits**
This course serves as an introduction to the physical therapy profession and includes the history and scope of physical therapy practice. Fundamental physical therapy handling skills and massage techniques are introduced and practiced by the students. Documentation of physical therapy services is introduced. This course will be a combination of lecture, demonstration and lab practice. Prerequisite: Acceptance into the Physical Therapy Program.

**PT 70400   Ethical and Psychosocial Dimensions of PT Practice - 3 hours, 3 credits**
This course examines the multifaceted role of the physical therapist in the health care delivery system introducing student to PT practice, methodology and professionalism as well as the psychosocial aspects which mediate physical therapy interactions. Prerequisite: Acceptance into the Physical Therapy Program.

**PT 70600   Upper Extremity Kinesiology & Assessment - 3 hours, 2 credits**
The structure and function of joints and muscles will be reviewed for the upper extremities, head, and neck. Clinical applications for functional movement and biomechanical principles are incorporated in the course. Students learn the skills of manual muscle testing (MMT) and goniometry for the upper extremities, head, and neck. Prerequisite: Acceptance into the Physical Therapy Program.

**PT 70700   Research Design and Methods - 3 hours, 3 credits**
Introduction to the scientific methods of inquiry, approaches to data analysis, types of experimental designs and their application to physical therapy research and practice. Prerequisite: Acceptance in the Physical Therapy Program.

**PT 70800   Human Physiology and Exercise Physiology - 5 hours, 5 credits**
This course provides an overview of cellular structures and functions which regulates body homeostasis from the point of cell division and genetic control of protein synthesis. Prerequisite: PT 70100

**PT 70900   Physical Modalities:  Clinical Decision Making & Application - 4 hours, 3 credits**
Principles and practical application of thermal, mechanical, electromagnetic and other energies in physical therapy is presented.   This course is an introduction and comprehensive review of the physical modalities that are commonly employed in the physical therapy clinic for evaluation and treatment of various physical dysfunctions. Prerequisite: PT 70100

**PT 74000   PT Prevention & Intervention - 6 hours, 4 credits**
Students learn and practice basic concepts of mobility, ROM and stretching techniques. Application of therapeutic exercise to a broad population of clients from acute care to sports rehab are discussed and practiced including prevention and restoration of function. Therapeutic application of basic neurophysiological principles associated with strengthening are also presented and practiced. Prerequisites: PT 70600, PT 70800

**PT 75100   Structure and Function of the Nervous System - 3 hours, 3 credits**
This course provides an overview of microscopic, gross, and developmental anatomy of the human nervous system with emphasis on neurological process, structural and functional relationships. A local progression of information from molecular and cellular levels, to systems and regions provides framework for students to understand neural organization. Prerequisites: PT 70100, PT 70800

**PT 75200   Lower Extremity Kinesiology & Assessment - 4 hours, 2 credits**
The structure and function of joints and muscles will be reviewed for the lower extremities and trunk.  Clinical applications for posture and gait evaluation are incorporated in the course.  Students learn the skills of manual muscle testing (MMT) and goniometry for the lower extremities and trunk. Prerequisites: PT 70100, PT 70800.

**PT 75500 Introduction to Clinical Education - 2 hours, 1 credit**
This course is designed to introduce the student to the principles and theories of educational and clinical strategies. Prerequisites: PT 70100, PT 70300, PT 70400.

**PT 77000   Directed Research I: Critical Inquiry - 1 hours, 1 credit**
To provide students with basic patterns of research from review of the literature to the design of an appropriate research project in the clinical physical therapy environment. Prerequisites: PT 70700.

**PT 78000   Clinical Medicine for PT - 3 hours, 3 credits**
This course provides an overview of disease and injury with an emphasis on conditions encountered in physical therapy. Student understanding of altered structural and physiological processes and how they apply to physical therapy assessment and treatment are expectations of this course. Prerequisites: PT 70100, PT 70800.

**PT 79000   Pulmonary Physical Therapy - 3 hours, 2 credits**

This course is designed to promote clinical reasoning skills in the examination, assessment, and intervention design for patients with pulmonary dysfunctions. A series of lectures, demonstrations, and laboratory experiences will explore the issues related to the management of the patient with a pulmonary disorder. Issues to be examined will include matters relating to professional behavior, scientific knowledge, clinical knowledge, critical analysis, and the competent performance of clinical interventions.  Prerequisites: PT 70100, PT 70800.

**PT 79500   Integumentary System: Assessment & Intervention - 2 hours, 1 credit**
The course focuses on evaluation and management of individuals with integumentary dysfunction.  Anatomy and physiology of the skin is and the principles involved in normal wound healing are presented.  Evaluation and management of individuals with burns and wounds based on clinical presentation will be covered in a lecture and practical format. Wound prevention and patient education will also be included as part of integumentary management. Prerequisites: PT 70100, PT 70800.

**PT 80300   Differential Diagnosis & Intervention in Clinical Orthopedics I - 3 hours, 2 credits**
This course is designed to promote clinical reasoning skills in the examination, assessment, and intervention of patients with orthopedic dysfunctions. Issues related to orthopedic dysfunction will be explored in a laboratory format. Prerequisites: PT 75100, PT 75200, PT 79000.

**PT 80400   Introduction to Neurological PT - 5 hours, 2 credits**
Foundations, examination, and interventions for the treatment of disorders of the Central Nervous System. Motor patterns of recovery and techniques as taught by Brunnstrom will be presented. Concepts of Motor Control and Motor Relearning Programs will enhance students’ application of these techniques within the context of modern movement science. Prerequisites: PT 75100, PT 75200.

**PT 80500   Musculoskeletal Examination I - 6 hours, 3 credits**
Basic examination techniques utilizing selective tissue tension tests that will be applied to evaluate and diagnose lower extremity orthopedic conditions. Joint and soft tissue mobilization techniques and specific exercises will be applied as the Physical Therapy intervention for these diagnoses. Prerequisites:  PT 74000, PT 75200, PT 78000

**PT 80600   Clinical Experience I - 6 weeks (full-time), 3 credits**
The first of four clinical internships in an acute care hospital setting or other setting appropriate for the objectives of this course.  Under the supervision of a licensed physical therapist, the student will integrate and apply course work to provide quality care in the evaluation and treatment of patients with a variety of diagnoses.  Prerequisites: PT 74000, PT 75200.

**PT 80700   Proprioceptive Neuromuscular Facilitation - 3 hours, 1 credit**
The historical and theoretical framework of Proprioceptive Neuromuscular Facilitation (PNF) will serve as the foundation for learning these specialized hands on exercise techniques.  Students will apply the principles for training of the trunk and extremity musculature to potential patients with musculoskeletal, neuromuscular and cardiopulmonary dysfunction.  Prerequisites: PT 80600.

**PT 80800   Differential Diagnosis in Neurological Evaluation - 3 hours, 1 credit**
A system of testing peripheral, central and autonomic nervous system function will be presented with an emphasis on specificity and sensitivity of the tests. Assessment of clusters of signs and symptoms that are used in clinical problem solving will be addressed. Prerequisites: PT 74000, PT 75200.

**PT 80900   Directed Research II - 1 hour, 1 credit**
Implement the research project at the designated locations and start data collection once all IRB approval(s) are in hand.  Continue until data collection is completed.  Prerequisites: PT 70700.

**PT 81000   Neurological Interventions I - 5 hours, 3 credits**
The course includes a description of the principles of rehabilitation, etiology of spinal cord injury and traumatic brain injury, anatomical and physiological considerations, and understanding of special problems faced by adults with physical disabilities, evaluation and treatment techniques, an understanding of adapted equipment and wheelchairs, evaluation of the home environment and appropriate modifications. Prerequisites: PT 80800, PT 80900.

**PT 81100   Cardiac Rehabilitation - 3 hours, 2 credits**

 **(delivered in a 9-wk semester: 5 hours, 2 credits)**
This course is designed to promote clinical reasoning skills in the examination, assessment, and intervention design for patients with cardiopulmonary dysfunctions. A series of lectures, demonstrations, and laboratory experiences will explore the issues related to the management of the patient with a cardiopulmonary disorder. Issues to be examined will include matters relating to professional behavior, scientific knowledge, clinical knowledge, critical analysis, and the competent performance of clinical interventions. Prerequisites: PT 70100, PT 70800.

**PT 81500   Physical Therapy in Acute Care - 2 hours, 1 credit**

 **(delivered in a 9-wk semester: 3 hours, 1 credit)**

This course is designed to introduce the student to the knowledge and skills necessary for a physical therapist to function in the acute care hospital setting. The student will be introduced to the various patient populations in the acute care hospital and the various roles and responsibilities of the physical therapist in this complex setting. Prerequisites: PT 74000, PT 75200, PT 78000.

**PT 82000   Differential Diagnosis and Interventions in Clinical Orthopaedics II / Radiology and Imaging - 3 hours, 3 credits**
Etiology and therapeutic management of selected orthopedic conditions of the upper extremity.  Introduction to radiology and many of the imaging techniques used in the diagnosis of soft tissue injuries and pathological conditions. Prerequisites: PT 80800, PT 80900.

**PT 83000   Orthotics & Prosthetics - 2 hours, 2 credits**
This course is designed to orient the student to the role and responsibilities of the physical therapist in the field of prosthetics and orthotics.  This course emphasizes advanced evaluation of normal and abnormal gait with implications for treatment intervention in order to prepare the student for working with amputees and patients requiring orthotics in the clinical setting. Prerequisites: PT 75200, PT 80500, PT 80800.

**PT 83500 Physical Therapy in Geriatrics – 1 hours, 1 credit**

This course is designed to foster the students’ knowledge, understanding, and skills necessary to providing physical therapy to the older adult. Students will examine the aging process across physiological systems for individuals with and without other co-existing conditions. The patient management model (examination, evaluation, diagnosis, prognosis, treatment planning, intervention, and outcomes) will be discussed as it applies to this population. Prerequisites: PT 70400, 78000, 84000.

**PT 84000   Differential Diagnosis & Intervention in Clinical Neurology - 3 hours, 3 credits**
This course describes specific neurological systems and presents the clinical implications of disease or injury on each of these systems.   Differential diagnosis of various peripheral nervous system and central nervous system disorders will be emphasized.  The therapeutic management and scientific basis of various neurological conditions are addressed.  Prerequisites: PT 80400, PT 80800.

**PT 85000   Musculoskeletal Examination II - 5 hours, 3 credits**
Basic examination techniques utilizing selective tissue tension tests will be applied to clarify common upper extremity orthopaedic diagnoses.  Joint and soft tissue mobilization techniques and specific exercises will be applied as the Physical Therapy intervention for these diagnoses.  Splinting for hands will be introduced.  Spinal pathophysiology, back, school, work hardening programs and ergonomics will be presented.  Prerequisites: PT 75200, PT 80300, PT 80500.

**PT 87000   Health Promotion Through the Lifespan - 2 hours, 2 credits**This course defines the role of physical therapy in health prevention, promotion, and wellness. Wellness throughout the life span is emphasized through incorporating the interrelationships between physical activity, stress, mind-body connections and nutritional health.  Prerequisites: PT 80600, PT 80700, PT 80900.

**PT 872   Topics in Physical Therapy – Hours Variable (minimum of 15) Credits Variable (minimum of 1)**
A course designed to cover clinical topics through lectures and laboratory classes taught by clinical specialists in physical therapy. Prerequisites:  Acceptance into the Doctor of Physical Therapy program.

**PT 88000   Neurological Interventions II - 4 hours, 2 credits**Foundations, assessment procedures, and application of classical therapeutic exercise with a neurophysiological basis for the treatment of adult and pediatric disorders of the Central Nervous System, with emphasis on the techniques taught by the Bobaths (Neurodevelopmental Treatment).Prerequisite: PT 81000.

**PT 88100   Seminar on Organization & Management - 3 hours, 3 credits**
This course is designed to provide information and develop skills to manage an organized physical therapy service. There is an emphasis on effective management principles including organizational structure, human resource management, fiscal planning, department design, continuous quality improvement and risk management.  The course will also describe the external environment of health care delivery, such as, government regulation, professional ethics and medical-legal issues. Prerequisites: PT 80600, PT 82000, PT 84000.

**PT 88200   Pediatric Development and Assessment - 2 hours, 2 credits**
Through lecture, laboratory experiences, discussion, videos and assigned readings, the student will be able to examine and understand normal and abnormal human development; theory and practice of physical therapy assessment and intervention in developmental disabilities. Prerequisites: PT 70600, PT 74000, PT 75200, PT 80300.

**PT 88300   Pharmacology for PT & Systems Review - 3 hours, 3 credits**
This course provides an overview of previously covered physiology and pathophysiology of different body systems and provides rationale for use of drugs and other available treatments in different diseases. Indications, contraindications, side effects of commonly used medications used by patients receiving physical therapy services are presented.  Prerequisites: PT 81000, PT 85000.

**PT 88400   Musculoskeletal Examination and Intervention  III - 5 hours, 3 credits**
Advanced management of the spine including selective tissue testing techniques.  Selection of appropriate physical therapy interventions for individuals with spinal dysfunction (excluding spinal cord injury); ergonomics, joint and soft tissue mobilization; back exercise; and neural tension testing. Prerequisites: PT 80500, PT 82000, PT 85000.

**PT 88500   Electrodiagnosis - 1 hours, 1 credits**
This course focusses on the physiological basis and techniques of the electrodiagnostic evaluation of the neuromuscular system through the use of nerve conduction studies and needle electromyography. Students learn the application of these techniques to the upper and lower extremities, and the interpretation of results/reports through case studies. Surface and needle kinesiological electromyographic recordings for research application will be examined. Prerequisites: PT 81000, PT 84000**.**

**PT 88600   Clinical Experience II - 10 weeks (full-time), 5 credits**
This is the second of four clinical experiences throughout the curriculum. A ten-week full-time placement is required for this clinical education experience. The purpose of the placement is to provide a hands-on patient care experience under the supervision of a licensed physical therapist. Clinical faculty serve as the direct instructors providing students with regular feedback. Students are monitored by the Director of Clinical Education (DCE) during this second clinical education experience. Prerequisites: PT 80600, PT 84000, PT 88200.

**PT 88700   Clinical Decision Making – 1 hour, 1 credit**
This seminar will bring students together to integrate clinical decision making through case studies, case scenarios, administrative issues and the resolution of conflict within the workplace.Prerequisites: PT 80600, PT 84000, PT 85000.

**PT 88800   Directed Research III:  Presentation Tactics - 1 hour, 1 credit**
Strategies for effective presentation of research findings in a professional forum.  Prerequisite: PT 80900.

**PT 88900   Clinical Affiliation III - 9 weeks (full-time), 4.5 credits**
This is the third of four clinical internship placements throughout the curriculum.  Prerequisites: PT 88600, PT 88800.

**PT 89000   Clinical Experience IV - 9 weeks (full-time), 4.5 credits**
This is the fourth of four clinical internship placements throughout the curriculum.  Prerequisites: PT 80600, PT 84000, PT 85000.

**PT 895  Directed Research IV: Manuscript Preparation - 1 hours, 1 credit**
Students will complete the research project and prepare a publishable manuscript.  Prerequisite: PT 888.