

Marshall University Graduate College
Plan of Study – School of Physical Therapy
Deceleration Pathway

Doctor of Physical Therapy Degree

Course No.	Hrs.	Year	Term	Semester	Course Title	Grade	Completion Date	Comments
PT 700	5	1	Summer	1	Gross Anatomy for Physical Therapy			
PT 710	3	1	Summer	1	Clinical Skills I			
PT 750	2	1	Summer	1	Foundations of Physical Therapy Practice			
PT 761	2	1	Summer	1	Evidence Based Practice I			
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PT 711	3	1	Fall	2	Kinesiology and Biomechanics in PT			
PT 720	3	1	Fall	2	Advanced Clinical Physiology			
PT 731	3	1	Fall	2	Clinical Skills II			
PT 741	2	1	Fall	2	Medical Pathology in PT I – General			
PT 751	2	1	Fall	2	Legal/Cultural Issues in PT			
	13							
PT 732	3	1	Spring	3	Therapeutic Exercise			
PT 742	2	1	Spring	3	Medical Pathology in PT II –MSK			
PT 745	1	1	Spring	3	Imaging in Physical Therapy			
PT 763	2	1	Spring	3	Evidence-Based Practice II			
PT 781	3	1	Spring	3	Orthopedics in PT I			
PT 790	1	1	Spring	3	Integrated Clinical Education in PT I			
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PT 747	2	2	Summer	4	Pharmacology in Physical Therapy			
PT 771	1	2	Summer	4	Clin Application Sem & Experiences I			
PT 782	4	2	Summer	4	Orthopedics in PT II			
PT 733	1	2	Summer	4	Therapeutic Modalities			
PT 734	1	2	Summer	4	Clinical Skills III			
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PT 701	4	1	Fall	5	Neuroanatomy			
PT 758	1	2	Fall	5	PM & BC in PT			
PT 764	1	2	Fall	5	Evidence-Based Practice III-Capstone			
PT 772	1	2	Fall	5	Clin Application Sem & Experiences II			
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PT 712	3	1	Spring	6	Motor Control and Development in PT			
PT 744	3	1	Spring	6	Medical Pathology in PT III- Neuro			
PT 755	1	2	Spring	6	Service-Learning Practicum			
PT 765	1	2	Spring	6	Evidence-Based Practice IV-Capstone			
PT 773	1	2	Spring	6	Clin Application Sem & Experiences III			
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Course No.	Hrs.	Year	Term	Semester	Course Title	Grade	Completion Date	Comments
PT 713	2	2	Summer	7	Outcome Measures in PT			
PT 748	1	3	Summer	7	Pain Science			
PT 766	1	3	Summer	7	Evidence Based Practice V –Capstone			
PT 787	2	3	Summer	7	Prosthetics & Orthotics			
PT 784	2	3	Summer	7	Integumentary			
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PT 702	1	2	Fall	8	Neuroevaluation			
PT 721	3	2	Fall	8	Applied Exercise Physiology			
PT 754	1	2	Fall	8	Healthcare Delivery Systems			
PT 791	4	2	Fall	8	Clinical Internship I			
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PT 704	4	2	Spring	9	Neurorehabilitation			
PT 767	1	3	Spring	9	Evidence-Based Practice VI- Capstone			
PT 786	3	2	Spring	9	Pediatrics & Geriatrics in PT			
PT 783	4	2	Spring	9	Cardio-Pulmonary Physical Therapy			
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PT 756	3	3	Summer	10	Administration in PT			
PT 774	1	3	Summer	10	Clin Application Sem & Experiences IV			
PT 799	1	3	Summer	10	Integration & Review			
PT 798	1	4	Summer	10	Independent Study			
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PT 788	1	3	Fall	11	Special Topics in Physical Therapy			
PT 714	1	3	Fall	11	Movement Integration			
PT 789	2	3	Fall	11	Orthopaedics in PT III			
PT 794	1	3	Fall	11	Integrated Clinical Experiences in PT II			
PT 792	6	3	Fall	11	Clinical Internship II			
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PT 785	2	3	Spring	12	Health Promotion and Nutrition (Distance)			
PT 793	6	3	Spring	12	Clinical Internship III			
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TOTAL HOURS 115 + 1 hr. Independent Study*

School of Physical Therapy: DPT Course Descriptions

Deceleration Pathway

Semester	#	Credits	Course Title	Course Description
Year 1 Summer 1 Semester 1	PT 700	5	Gross Anatomy for Physical Therapy	Lecture and laboratory focusing on anatomical structure and function of the human body. Cadaveric dissection provides practical experiences allowing students to develop working images of the body and its function.
	PT 710	3	Clinical Skills I	Lecture and laboratory introducing students to basic histology of connective, nervous, epithelial and muscle tissue utilized in human movement, palpations skills, goniometry, and manual muscle testing.
	PT 750	2	Foundations of PT Practice	Introduces students to medical terminology, historical foundations, and contemporary practice of physical therapy, traditional and emerging roles and responsibilities and professional behaviors of the physical therapist and issues of self-awareness and communications.
	PT 761	2	Evidence-Based Practice I	Decision making, diagnosis, and hypothesis development, utilization of information sources, and principles, concepts, and skills required to critically analyze and conduct clinical research in physical therapy.
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Year 1 Fall 1 Semester 2	PT 711	3	Kinesiology & Biomechanics in PT	Biomechanical principles, muscle actions, joint mechanics, joint segments, and whole-body movement pattern analysis including normal and abnormal gait.
	PT 720	3	Advanced Clinical Physiology	Reviews normal human cellular- and organ-level physiology, histology, and function, and introduces related topics of pathophysiology including: clinical signs and symptoms, clinical laboratory science, medical management, and pharmacological issues.
	PT 731	3	Clinical Skills II	Theory/practice of essential physical therapy skills, including clinical decision making, interview, postural and functional assessment, safe patient handling techniques of positioning, bed mobility, transfers, and use of assistive devices.
	PT 741	2	Medical Path in PT I- General	Pathological conditions, and medical and surgical considerations for treatment of genetic, gastrointestinal renal, endocrine, and metabolic, immune, hematologic, and infectious disorders in patients treated by physical therapists.
	PT 751	2	Legal-Cultural Issues in PT	Development of cultural competence, analysis, and practice of communications skills including documentation, professionalism, group dynamics and leadership to assume roles of practitioner, instructor, supervisor, and leader.
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Year 1 Spring 1 Semester 3	PT 732	3	Therapeutic Exercise	This 3-credit hour course introduces students to teaching and learning principles through the application of physical, thermal, and mechanical modalities and therapeutic interventions. Therapeutic interventions include activities to improve joint and muscles.
	PT 742	2	Medical Path in PT II- Musculoskeletal	Pathological conditions, and medical and surgical considerations for treatment of musculoskeletal disorders in patients treated by physical therapists.
	PT 745	1	Imaging in Physical Therapy	This course combines lecture and lab practice to familiarize students with the use of medical imaging by physical therapists. Content covered includes plain film radiographs, as well as advanced imaging modalities of MRI, CT, Bone Scan, and Ultrasound. Course content emphasizes clinical decision making and inclusion of imaging findings into the overall patient exam.
	PT 763	2	Evidence-Based Practice II	Students are guided through the process of a Systematic Literature Review development on a topic selected by the student and their Faculty Research Advisor and learn to apply principles of research to the clinical decision-making process and to make recommendations for practice.
	PT 781	3	Orthopedics in PT I	The basic principles of orthopedic medicine including an overview of etiology, diagnosis, and surgical management will be covered. Physical Therapy examination, evaluation, diagnosis, and treatment of extremities and spine will be emphasized.
	PT 790	1	Integrated Clinical Experiences in PT I	Supervised clinical experiences and seminar sessions designed to provide exposure to the clinical practice of physical therapy, focused on psychomotor skills and affective behaviors, while applying previously acquired didactic information.
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Year 2 Summer 2 Semester 4	PT 747	2	Pharmacology in Physical Therapy	Examination of the effects of commonly used prescription, over the counter and homeopathic drugs. Focus on method of action, indications, contraindications, side effects and impact on physical therapy patients.
	PT 771	1	Clinical Application Seminar and Experiences I	Continued application of information and clinical skills learned in concurrent and prior DPT coursework in a small group discussion and pseudo-clinical setting. Focus on upper and lower extremities.
	PT 782	4	Orthopedics in PT II	Advanced concepts of musculoskeletal examination, evaluation, diagnosis and treatment of the extremities and spine will be covered. An evidence-informed/clinical reasoning-based manual therapy approach will be used including mobilization and manipulation.
	PT 733	1	Therapeutic Modalities	Physiological effects and the clinical application of therapeutic modalities (biophysical agents) in physical therapy practice.
	PT 734	1	Clinical Skills III	Comprehensive patient/client management approach for conditions in acute care involving clinical decision-making, effective communication, safety, patient management, discharge planning, and introduction to equipment, lines & tubes, lab values, and medications.
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Year 2 Fall 2 Semester 5	PT 701	4	Neuroanatomy	Normal and abnormal structure and function of central, peripheral, and autonomic systems, neurodevelopment, and neural mechanisms mediating motor control and pain with emphasis on clinical relevance to physical therapy.
	PT 758	1	PM & BC in PT	Introduction to patient motivation and behavioral change in physical therapy practice. Emphasis on practical strategies to promote healthy patient/client change leading to improved human movement and overall health.
	PT 764	1	Evidence-Based Practice III- Capstone	Continuation of Evidence-Based Practice II where students receive continued guidance in the completion of the faculty-led capstone project begun in EBP II. Presentation of capstone required before graduation.
	PT 772	1	Clinical Application Seminar and Experiences II	Continued application of information and clinical skills learned in concurrent and prior DPT coursework in a small group discussion and pseudo-clinical setting. Focus on general interventions in interdisciplinary management with complex concerns
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Year 2 Spring 2 Semester 6	PT 712	3	Motor Control and Development in PT	Reviews maturation of movement systems, lifespan motor skills development, and contemporary theories of motor control and learning to build evidence-based foundations for evaluation and management of movement dysfunction.
	PT 744	3	Medical Path in PT III- Neuro	This course reviews the functional neuroanatomy and neuropathology correlated with select neuropathological conditions or injury, focusing on etiology, epidemiology, medical/surgical considerations, neural substrates of cognitive, perceptual, and sensorimotor function in patients treated by physical therapists.
	PT 755	1	Service-Learning Practicum	Allows participation in service-learning programs developed in Professional Practice III, emphasizing advocacy for the health needs of the region, as well as coordination with community agencies.
	PT 765	1	Evidence-Based Practice IV- Capstone	Continuation of Evidence-Based Practice III where students receive continued guidance in the completion of the faculty-led capstone project begun in EBP II. Presentation of capstone required before graduation.
	PT 773	1	Clinical Application Seminar and Experiences III	Continued application of information and clinical skills learned in concurrent and prior DPT coursework in a small group discussion and pseudo-clinical setting. Focus on cardiopulmonary and intra-disciplinary management of patients with complex concerns.
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Year 3 Summer 3 Semester 7	PT 713	2	Outcome Measures in PT	Assessment of constraints to normal movement, application of standardized tools for assessment of movement dysfunction, examination of statistical data (population-specific reliability, validity, sensitivity, specificity, odds ratios) of said tools.
	PT 748	1	Pain Science	A study of the multidimensional nature of pain using a biopsychosocial approach that includes contemporary pain science theories, concepts and principles, and the holistic assessment and management of pain in physical therapy practice.
	PT 766	1	Evidence-Based Practice V- Capstone	Continuation of Evidence-Based Practice IV where students receive continued guidance in the completion of the faculty-led capstone project begun in EBP II. Presentation of capstone required before graduation.
	PT 784	3	Integumentary	Review of structure, function, and applied pathophysiology of integumentary system. Translate knowledge towards PT examination and management of common integumentary impairments with a focus on prevention, restoration, and optimizing independence.
	PT 787	2	Prosthetics & Orthotics	Principles of evaluation and management of patients with amputation and/or neuromuscular disorders to maximize functional independence. Focus on prosthetic and orthotic prescription, components, fabrication, fit, and use during functional activities.
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Year 3 Fall 3 Semester 8	PT 702	1	Neuroevaluation	Comprehensive screening, exam, and evaluation of patients with neurological dysfunction with focus on selection and interpretation of examination components in order to discern underlying pathophysiology reflective of neurological dysfunction.
	PT 721	3	Applied Exercise Physiology	Physiological effects of exercise and training in healthy individuals and individuals with pathological dysfunction.
	PT 754	1	Healthcare Delivery Systems	Micro and macro principles of healthcare delivery systems, sites, and organizations and pro bono services. Legalities of appropriate documentation for third-party payers and federal insurance programs are addressed.
	PT 791	4	Clinical Internship I	Supervised clinical education experience emphasizing continued development and reinforcement of clinical skills in clinical settings. Competence is expected in areas of the material presented to date in the curriculum.
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Year 3 Spring 3 Semester 9	PT 704	4	Neurorehabilitation	Theoretical basis and clinical application of neurophysiological approaches to treatment utilizing motor control, sensorimotor development, and integration principles, including discussion and practice of current methods of evaluation and intervention.
	PT 767	1	Evidence-Based Practice VI- Capstone	Continuation of Evidence-Based Practice V where students receive continued guidance in the completion of the faculty-led capstone project begun in EBP II culminating with presentation of completed capstone.
	PT 783	4	Cardio-Pulmonary Rehabilitation	An overview of cardiovascular and pulmonary systems pathologies, medical diagnosis and management and physical therapy diagnosis, examination, assessment, and management of related physiological and movement dysfunctions.
	PT 786	3	Rehabilitation Consideration in Selected Patient Population I	Principles of evaluation and treatment in the areas of pediatrics and geriatrics. Emphasis placed on biopsychosocial aspects of developmental disabilities, coordination of care and complexities of multi-system and multi-organ disease.
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Year 4 Summer 4 Semester 10	PT 756	3	Administration in PT	Emphasis on administration of clinical practice in multiple settings. Information about licensure, attainment and retention of employment, professional organization membership, residency and fellowship programs, and specialization.
	PT 774	1	Clinical Application Seminar and Experiences IV	Continued application of information and clinical skills learned in concurrent and prior DPT coursework in a small group discussion and pseudo-clinical setting-Focus on neurological, integumentary dysfunctions, and prosthetic & orthotic prescription.
	PT 799	1	Integration & Review	Integration and review of clinical physical therapy principles and concepts in preparation for the National Physical Therapy Board Examination.
	PT 798	1	Independent Study	
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Year 4 Fall 4 Semester 11	PT 788	1	Special Topics in Physical Therapy	Principles of physical therapy management of select patient populations including bariatrics, women's health, oncology, and selected progressive and chronic diseases.
	PT 714	1	Movement Integration	This course introduces students to Integrative knowledge of the movement system with synthesis of physiological functions and patient specific movement patterns. Focus on identification of movement impairments, adaptive strategies, and imbalance, as well as effective movement analysis for appropriate evaluation and treatment of movement dysfunction. The course prepares students to identify as movement system experts upon culmination of a doctorate in physical therapy.
	PT 789	2	Orthopaedics in PT III	Advanced diagnosis and management approaches for complex orthopedic, and sports PT populations will be covered. Differential diagnosis of upper and lower quarter pathology, along with specialized treatments unique to this population will be emphasized.
	PT 794	1	Integrated Clinical Experiences in PT II	In development
	PT 792	6	Clinical Internship II	Supervised clinical education experience emphasizing continued development and reinforcement of clinical skills in various clinical settings. Competence is expected in areas of the material presented to date in the curriculum.
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Year 4 Fall 4 Semester 11	PT 785	2	Health Promotion and Nutrition (Distance)	Development and maintenance of healthy lifestyles for patients and clients. Focus on disease prevention, nutritional needs, and the benefits of exercise as well as managing individuals with injury or disease.
	PT 793	8	Clinical Internship III	Supervised clinical education experience emphasizing continued development and reinforcement of clinical skills in various clinical settings. Competence is expected in areas of the material presented to date in the curriculum.
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