

PHYSICAL THERAPY CONCENTRATION (B.H.S.)

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Chairperson: Sara F. Maher

Director: Kristina Reid, Physical Therapy Program

<http://www.pt.cphs.wayne.edu/> (<http://pt.cphs.wayne.edu/>)

Physical Therapists provide services to patients/clients who have impairments of body function and structure, activity limitations, and participation restrictions or changes in physical function and health status resulting from injury, disease, or other causes. Physical therapists collaborate with a variety of professionals, address risk factors to health, are leaders and providers in the areas of prevention and promoting health, wellness and fitness, serve as educators, consultants, administrators, and advocates, utilize critical inquiry skills and direct and supervise the provision of physical therapy services. Physical Therapy services include examination, evaluation, diagnosis, prognosis, and intervention primarily for individuals with musculoskeletal, neuromuscular, cardiopulmonary, and/or integumentary conditions. Physical therapists practice in a wide variety of settings including hospitals, outpatient clinics, private practice, schools, academia, home care, industrial clinics, sports clinics, rehabilitation centers, and health and wellness programs. Students interested in the physical therapy profession should also visit the American Physical Therapy Association (<http://www.apta.org>) website.

The physical therapy curriculum at Wayne State University is a professional degree program leading to the Doctor of Physical Therapy (<http://bulletins.wayne.edu/graduate/college-pharmacy-health-sciences/health-care-sciences/physical-therapy-dpt/>) degree. The entire program involves a pre-professional component: ninety credits of undergraduate course work; a first year of physical therapy courses taken under qualified graduate status; and the final two and one half years of Physical Therapy courses taken under regular graduate status. Only those portions of the program that may be completed during the first four years of what is usually construed as an undergraduate matriculation are presented in this Bulletin. The balance of the program is presented in the Graduate Bulletin.

The program of study in physical therapy is accredited by the:

Commission on Accreditation in Physical Therapy Education for the Doctor of Physical Therapy program
Attn: Accreditation Dept.
1111 N. Fairfax St.
Alexandria VA 22314-1488
(<http://www.apta.org> (<http://www.apta.org/>))

Graduates who receive a Doctor of Physical Therapy degree are eligible to take the national physical therapy licensure examination and the Canadian licensure examination and for active membership in the American Physical Therapy Association.

Admission Requirements

Admission to the Doctor of Physical Therapy (D.P.T.) (<http://bulletins.wayne.edu/graduate/college-pharmacy-health-sciences/health-care-sciences/physical-therapy-dpt/>) degree program prior to the beginning of the senior year is required to complete the B.H.S. physical therapy concentration requirements. Admission to the D.P.T. program is highly competitive and requires completion of the pre-professional program. Students should refer to the Graduate Bulletin for admission and course requirements for the D.P.T. degree.

Program Requirements

PLEASE NOTE: Student may NOT apply to or earn the Bachelor of Health Science with a concentration in physical therapy degree retroactively or after a subsequent higher level degree has been conferred.

The Eugene Applebaum College of Pharmacy and Health Sciences has established a combined undergraduate and graduate program in Physical Therapy. Qualified senior students may enroll simultaneously in the undergraduate Bachelor of Health Science with concentration in physical therapy degree program and the graduate Doctor of Physical Therapy (D.P.T.) degree program and apply a maximum of thirty credits toward both the undergraduate and graduate degree. Those who elect the combined program may expect to complete the B.H.S. physical therapy concentration and the D.P.T. degrees in 6.5 years of full-time study.

Degree Requirements

All course work for the B.H.S. physical therapy concentration must be completed in accordance with the academic procedures of the University (<http://bulletins.wayne.edu/undergraduate/general-information/academic-regulations/>) and the College (<http://bulletins.wayne.edu/undergraduate/college-pharmacy-health-sciences/academic-regulations/>) governing undergraduate scholarship and degrees. Students will need to complete one hundred and twenty credits with a g.p.a. of 2.0 or better, including courses taken that apply to the concentration. Students who have successfully completed at least 30 credits at Wayne State University are eligible.

Course Requirements

Code	Title	Credits
Science Prerequisite Courses		
BIO 1510	Basic Life Mechanisms	4
BIO 2870	Anatomy and Physiology	5
Biology class at the upper level (3 credits at the 3000 level or higher)		
PHY 2130	Physics for the Life Sciences I	4
PHY 2131	Physics for the Life Sciences Laboratory	1
PHY 2140	Physics for the Life Sciences II	4
PHY 2141	Physics for the Life Sciences Laboratory	1
Two chemistry courses with at least one lab, as long as topics do not 8-10 overlap (options for chemistry courses listed below)		
CHM 1020	Survey of General Chemistry	
CHM 1030	Survey of Organic/Biochemistry	
CHM 1100	General Chemistry I	
& CHM 1130	and General Chemistry I Laboratory	
CHM 1240	Organic Chemistry I	
& CHM 1250	and Organic Chemistry I Laboratory	
Non-Science Prerequisite Courses		
ENG 1020	Introductory College Writing	3
PSY 1010	Introductory Psychology	4
or PSY 1020	Elements of Psychology	
STA 1020	Elementary Statistics	3
Civic Literacy (CIV)		
Cultural Inquiry (CI)		
Diversity, Equity and Inclusion (DEI)		
Global Learning (GL)		
Intermediate Composition (IC)		
Oral Communication (OC)		
Social Inquiry (SI)		
Electives		
To reach 90 credits		0-12
B.H.S. Physical Therapy Concentration Courses		

Select up to 30 credits of the following:	30
PT 5010	Clinical Applications I
PT 5020	Foundations of Physical Therapy
PT 5030	Basic Patient Care in Physical Therapy
PT 5120	Human Growth and Development
PT 5300	Surface Anatomy
PT 5320	Basic Examination and Evaluation Procedures
PT 5400	Neurosciences for Health Care Professionals
PT 5410	Clinical Medicine I
PT 5430	Clinical Medicine II
PT 5500	Kinesiology and Biomechanics
PT 5505	Clinical Applications of Human Anatomy
PT 5510	Clinical Applications of Human Anatomy: Laboratory
PT 5650	Pathophysiology for Health Sciences
PT 5660	Pathokinesiology
PT 6300	Research I: Critical Thinking
PT 6310	Advanced Exercise Physiology
PT 6400	Teaching and Learning in Health Care
PT 6700	Motor Learning and Motor Control

¹ Can be completed by passing proficiency examination.

² ECO 1000 or ECO 2010 recommended

Honors Designation

Students enrolled in the Irvin D. Reid Honors College while completing the pre-concentration requirements will be eligible for the Honors distinction with the B.H.S. degree if all requirements set forth by the Honors College have been met.

PT 5010 Clinical Applications I Cr. 1

First part-time integrated clinical experience for physical therapy students. Orientation to clinical education and PT practice to develop professional behaviors, observation skills, fundamentals of written and verbal communication and basic examination and intervention skills in a clinical setting. Offered Winter.

Course Material Fees: \$20

PT 5020 Foundations of Physical Therapy Cr. 2

Satisfies General Education Requirement: Writing Intensive Competency Sociological and historical background of the PT profession. Professional behavior, patient care interaction and medical terminology. Basic physical therapy care procedures, documentation, patient education, care in medical emergencies. Offered Fall.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$90

PT 5030 Basic Patient Care in Physical Therapy Cr. 2

Introduction to the basic skills necessary for patient care and provide a foundation to the theory and practice of basic patient care procedures for the Physical Therapist. Offered Fall.

Restriction(s): Enrollment is limited to Graduate level students; enrollment limited to students in a Doctor of Physical Therapy degree; enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$25

PT 5070 Clinical Applications II Cr. 2

Second part-time integrated clinical experience for physical therapy students. This clinical education course includes and orientation to basic and intermediate examination and intervention skills, professional behavior, communication, documentation, inter-professional collaboration and team work. Offered Fall.

Prerequisite: PT 5010 (may be taken concurrently)

Course Material Fees: \$30

PT 5100 Therapeutic Exercise I Cr. 3

Foundational course designed to focus on the principles and techniques of therapeutic exercise for patients with pathological conditions to the neuromusculoskeletal system. Students will develop and administer treatment plans for specific patient problems and progress treatment plans based on patient condition and response to treatment. Offered Fall.

Prerequisite: PT 5430 and PT 5500

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$100

PT 5120 Human Growth and Development Cr. 2

Theories and basic principles in prenatal, physical, sensorimotor, perceptual, cognitive, social, emotional and language growth and development. Implications for physical therapy evaluation and treatment of children with developmental disabilities. Offered Spring/Summer.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$10

PT 5300 Surface Anatomy Cr. 2

Laboratory-based course teaching skills for soft tissue palpation, identification of surface anatomy landmarks, soft tissue mobilization and massage. Offered Fall.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PT 5320 Basic Examination and Evaluation Procedures Cr. 3

Lecture and laboratory experience focusing on principles and procedures of foundational medical screening, physical therapy differentiation, and clinical reasoning and decision-making skills; basic principles and techniques for posture, integumentary, neurological, range of motion, and strength examination and evaluation, documenting progress and outcome, and the continued development of patient care skills. Offered Winter.

Prerequisite: PT 5030 and PT 5300 and PT 5505

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$10

PT 5400 Neurosciences for Health Care Professionals Cr. 3

Study of the human central nervous system; emphasis on sensory and motor systems and structures that contribute to normal movement. Offered Fall.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$50

Equivalent: OT 5400

PT 5410 Clinical Medicine I Cr. 3

Designed to provide specific information needed by the physical therapist treating patients with a variety of diseases. Pathology, etiology, clinical signs and symptoms, prognosis, and treatment of a variety of illnesses and conditions relevant to physical therapy treatment are covered. The role of other health care specialists including physician, occupational therapist, speech pathologist, nurses and psychologists is explored. Offered Winter.

Restriction(s): Enrollment is limited to students with a major in Physical Therapy.

PT 5430 Clinical Medicine II Cr. 1

Disease processes, and medical and surgical interventions. Role of physical therapy as part of comprehensive multi-disciplinary health care team. Offered Spring/Summer.

Prerequisite: PT 5410

Restriction(s): Enrollment is limited to students with a major in Physical Therapy.

PT 5500 Kinesiology and Biomechanics Cr. 3

Normal movement and biomechanics applied to the human body. Offered Winter.

Prerequisite: PT 5505 and PT 5510 and PT 5400

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$20

PT 5505 Clinical Applications of Human Anatomy Cr. 3

Knowledge of basic human anatomy for students in health science professional programs; foundation for further study in clinical sciences. Offered Fall.

Restriction(s): Enrollment is limited to students with a major, minor, or concentration in Occupational Therapy or Physical Therapy.

Equivalent: OT 5505

PT 5510 Clinical Applications of Human Anatomy: Laboratory Cr. 1

Examination of prosections, dissection of human cadavers; didactic study. Offered Yearly.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$220

Equivalent: OT 5510

PT 5650 Pathophysiology for Health Sciences Cr. 3

Fundamental knowledge of the nature of disease for the health sciences student; physiologic and morphologic changes accompanying disease processes; mechanisms of repair and recovery. Offered Fall.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Equivalent: OT 5650, RT 5650

PT 5660 Pathokinesiology Cr. 2

A continuation of PT 5500 (Kinesiology and Biomechanics), this course is designed to teach: foundational principles regarding biomaterials, key biomechanical and kinesiological principles of human movement as related to anatomy and physiology, and application of this information to clinical situations that involve alterations in movement. Analyses of pathological motion and pathokinesiology of selected joints will be included. Offered Spring/Summer.

Prerequisite: PT 5500

Corequisite: PT 5670

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$10

PT 5670 Special Test in Physical Therapy Cr. 1

A continuation of PT 5300 (Basic Evaluation), this course is designed to teach Special Test as part of a physical therapy examination. Student will relate the special tests to appropriate pathologies, perform and interpret the results of special tests and discuss hypotheses in light of evidence-based knowledge. Offered Spring/Summer.

Prerequisite: PT 5300

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PT 5800 Clinical Education I Cr. 3

First of a four-course clinical education series. Six weeks of full-time supervised clinical experience for physical therapy students. Offered Yearly.

Course Material Fees: \$20

PT 5820 Clinical Education II Cr. 3

Second of a four-course clinical education series. Six-week of full-time supervised clinical experience for physical therapy students. Offered Spring/Summer.

Restriction(s): Enrollment limited to students in the Doctor of Physical Therapy program.

Course Material Fees: \$45

PT 5990 Directed Study Cr. 1-4

The remediation directed study has been designed to help students remediate for academic or clinical competency standards in the Physical Therapy program. The student will identify, based on performance areas of weakness on course content or clinical skills. Once identified a faculty mentor will assist the student in developing a plan to develop mastery of the content or clinical skills needed to be deemed competent in deficient areas and continue in the PT program. The remediation plan will then be implemented by the student. Offered Every Term.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Repeatable for 8 Credits

PT 6100 Therapeutic Exercise II Cr. 3

Advanced application of principles and techniques of therapeutic exercise; evaluation and modification of therapeutic exercise plan of care, based on physical and functional responses and characteristics of patients or clients. Offered Fall.

Prerequisite: PT 5100

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

Course Material Fees: \$15

PT 6200 Diversity, Ethics and Legal Issues in Health Care Cr. 3

Impact of diversity and legal practice standards, including federal, state, and institutional regulations related to patient care and fiscal management of health care practice. Issues in cultural awareness, cultural sensitivity, cultural competence, ethics, and ethical decision making in personal, professional, and societal contexts. Self-analysis of personal attitudes, values, and beliefs. Offered Winter.

Prerequisite: PT 5020

Restriction(s): Enrollment is limited to students with a major in Physical Therapy.

PT 6300 Research I: Critical Thinking Cr. 2

Introduction to evidence-based practice and clinical reasoning and decision making. Identification, location, critique and analysis of evidence. Offered Fall, Winter.

Restriction(s): Enrollment limited to students in the Doctor of Physical Therapy program.

PT 6310 Advanced Exercise Physiology Cr. 3

Metabolic, neuromuscular, cardiovascular, and respiratory adjustments to acute and chronic exercise in health and disease, including body composition and weight control, nutritional considerations, and the effects of different environments on exercise performance. Offered Fall.

Equivalent: PSL 6010

PT 6400 Teaching and Learning in Health Care Cr. 2-3

Exploration of theoretical and practical issues pertinent to physical therapy profession: educational methods, adult learning theories, instructional design methodologies, evaluation, instructional management. Additional project required if elected for three credits. Offered Winter.

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PT 6500 Pharmacology Cr. 2

Effects of drug distribution, absorption and excretion as pertaining to physical therapy. Major drug categories, OTC, and nutritional supplements, pertinent to acute and chronic responses to physical therapy; indications, mechanisms, effects. Offered Fall.

Prerequisite: PT 5430 and PT 5650

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PT 6700 Motor Learning and Motor Control Cr. 2-3

Current theories and concepts in processes of motor skill acquisition and performance, from a behavioral objective. Additional evidence-based case reports required if elected for three credits. Offered Winter.

Prerequisite: PT 5400 with a minimum grade of C-

Restriction(s): Enrollment limited to students in the Pharmacy and Health Sciences.

PT 6750 Seminar: Complementary and Special Topics in Health Care Cr. 2

Physical, psychological, and nutritional approaches relevant to practice of physical therapy. Seminar course. Offered Winter.

Prerequisite: PT 5430 and PT 6300

Restriction(s): Enrollment is limited to students with a major in Physical Therapy.

ADAMO, DIANE: Ph.D., University of Michigan; M.S., B.S., Wayne State University; Associate Professor

DICKSON, JENNIFER: D.P.T., M.P.T., B.S., Oakland University; Clinical Assistant Professor

FRITZ, NORA E.: Ph.D., D.P.T., The Ohio State University; B.S., Miami University; Assistant Professor

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MALEK, MOH: Ph.D., University of Nebraska-Lincoln; M.S., California State University Fullerton; B.A., The Claremont Colleges, Pitzer College; Associate Professor

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