

New York University Bulletin



GRADUATE 2011-2013

NYUSteinhardt

Steinhardt School of Culture, Education, and Human Development

Applied Psychology

Art

Education

Health

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Music

DEPARTMENT OF

Physical Therapy

DEGREES

M.A., D.P.T., Ph.D., Advanced Certificate

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Notice: The programs, requirements, and schedules listed herein are subject to change without notice. A directory of classes is published each term with a current schedule. For the most up-to-date schedule changes, please consult ALBERT, NYU's student information website.

CHAIR: WEN K. LING

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The Department of Physical Therapy at New York University has been a leader in physical therapy education since 1942. The professional entry-level doctoral program began in 1998.

New York University offered the first M.A. program and the first Ph.D. program in physical therapy in the United States. The University continues to lead in physical therapy graduate education. Graduate programs in physical therapy leading to the M.A. or Ph.D. degree are open to physical therapists who are graduates of accredited physical therapy programs. Students have the opportunity to work with our experienced faculty in state-of-the-art research laboratories. In addition, federal- and state-level grants provide significant financial aid for qualified full-time students.

Faculty

Offiong Aqua, Clinical Associate Professor. M.D. 1986, Friendship (Russia).

Mitchell Batavia, Associate Professor. B.S. 1981, Delaware; M.A. 1986, Columbia; Ph.D. 1997, New York; PT.

Elaine Becker, Clinical Associate Professor. B.S. 1968, M.A. 1983, New York; D.P.T. 2008, Temple; PT.

Ann Goerdts, Clinical Assistant Professor. B.S. 1966, St. Louis; M.A. 1972, Ph.D. 1984, New York; PT

Gregory M. Gutierrez, Assistant Professor. B.S. 2002, M.S. 2005, Florida; Ph.D. 2008, Delaware.

Louis N. Iannuzzi, Clinical Assistant Professor. B.S. 1978, Wisconsin (Milwaukee); B.S. 1980, New York; PT

Wen K. Ling, Chair and Associate Professor. B.S. 1978, National Taiwan; M.A. 1980, Ph.D. 1984, New York; PT.

Tsega A. Mehreteab, Clinical Professor. B.S. 1973, Hunter College (CUNY); M.S. 1977, Rutgers; D.P.T. 2005, Temple; PT.

Marilyn Moffat, Professor. B.S. 1962, Queens College (CUNY); M.A. 1964, Ph.D. 1973, New York; D.P.T. 2006, MGH; PT.

Smita Rao, Assistant Professor. B.S. 1998, M.S. 2000, Mumbai; Ph.D. 2006, Iowa; PT.

Kevin Weaver, Clinical Assistant Professor. B.S. 1990, M.A. 1995, New York; D.P.T. 2005, Temple; PT.

Number of Adjunct Faculty: 65

Advanced Certificate Program in Orthopedic Physical Therapy

DIRECTOR

Kevin Weaver

380 Second Avenue,
4th Floor
212-998-9411

DEGREE

Advanced Certificate

FACULTY

Batavia, Rao, Weaver

ADJUNCT FACULTY

Deyle, Gornell,
Hegedus, Hicks,
Lombardo, Manal,
Michlovitz, Puniello,
Rowe

The Advanced Certificate Program

in Orthopedic Physical Therapy is designed for licensed physical therapists to obtain advanced knowledge and clinical skills in orthopedic physical therapy.

DEGREE REQUIREMENTS

This certificate program requires the completion of 16 credits. The program includes a didactic component consisting of six courses and a clinical component consisting of three internship experiences requiring 1,632 hours (34 clinical hours per week for 48 weeks). Courses are offered throughout the year in summer, fall, and spring on weekends as well as on weekdays. Students complete this program in 12 months.

ADMISSION REQUIREMENTS

Only licensed physical therapists with at least a baccalaureate degree in physical therapy will be considered as candidates for matriculation in the Advanced Certificate Program in Orthopedic Physical Therapy. Applicants must have a strong grade unit average in a physical therapy professional program, competence in conveying ideas in an organized manner through written communications, and two letters of recommendation.

Pathokinesiology

DIRECTOR

Marilyn Moffat

380 Second Avenue,
4th Floor
212-998-9406

DEGREE

M.A.

FACULTY

Batavia, Gutierrez,
Ling, Moffat, Rao

ADJUNCT FACULTY

Magill, McHugh,
Raghavan

The Master of Arts degree

concentration in the kinesiology of persons with disabilities prepares physical therapists for advanced practice, clinical research, and teaching. Students develop competent clinical research skills to examine motor control problems in individuals with physical disabilities. This 36-unit concentration gives students expertise in the analysis and synthesis of human motion, measurement and evaluation of human motion, and research design and implementation. Students study both normal and abnormal human motion. Electro-goniometry, electromyography, dynamometry, and cinematography are used to illustrate the most advanced theories and techniques for measurement and evaluation of human motion. Coursework and independent study enhance capacities for scientific thought and develop skills in research methodology and data analysis.

CAREER OPPORTUNITIES

Graduates from this program work as clinical researchers, teachers, administrators, and clinicians in a variety of settings.

DEGREE REQUIREMENTS

This concentration requires a minimum of 36 units including a master's thesis pertaining to the scientific study of pathological human motion or intervention procedures designed to improve motor control. A total of 6 units may be taken outside of New York University and may be transferred for credit to the degree as long as prior permission and approval have been obtained from the adviser and the Graduate Studies Office.

Requirements (32 units): Research in Physical Therapy I *PT-GE.2016*, Research in Physical Therapy II *PT-GE.2018*, Analysis and Synthesis of Human Motion I *PT-GE.2116*, Analysis and Synthesis of Human Motion II *PT-GE.2118*, Measurement and Evaluation of Human Motion I *PT-GE.2187*, Measurement and Evaluation of Human Motion II *PT-GE.2188*, Independent Study *PT-GE.2300*, Basic Statistics I *RESCH-GE.2085* (or an advanced statistics course), Basic Statistics II *RESCH-GE.2086* (or an advanced statistics course), master's thesis.

Elective Courses (6 units): Gross Human Anatomy *PT-GE.2120*.

ADMISSION REQUIREMENTS

Only graduate physical therapists with a minimum of a baccalaureate degree in physical therapy will be considered as candidates for matriculation in the pathokinesiology master's concentration. It is anticipated that the candidate will have one year of clinical experience prior to undertaking this M.A. concentration. Foreign-trained physical therapists should first request review of their credentials from the World Education Services, www.wes.org.

See *general admission section, page 156*.

SPECIAL OPPORTUNITIES

Opportunities exist for graduate students to perform instruction in portions of the basic professional courses under the supervision of full-time faculty. These teaching experiences may be formulated on an individual basis by the student's adviser. This type of experience is considered essential, as many candidates for this degree are contemplating a teaching career in physical therapy.

Doctor of Physical Therapy Entry-Level Program

DIRECTOR

Marilyn Moffat

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DEGREE

D.P.T.

FACULTY

Aqua, Batavia, Becker,
Goerd, Gutierrez,
Iannuzzi, Ling,
Mehreteab, Moffat,
Rao, Weaver

ADJUNCT FACULTY

Accetola, Ciotoli,
Cooper, Edelstein,
Friedman, Garritan,
Haas, Keller,
Keohane, Kharlamb,
Levy-Santoro, Lim,
Malyango, McGuinness,
O'Brien, Pensavalle,
Roy, Wishe, Zane

The Doctor of Physical Therapy degree program is the professional physical therapist educational program at New York University that prepares students for entry into the practice of physical therapy. Since physical therapy is a dynamic profession with an established theoretical base and widespread clinical applications, particularly in the preservation, development, and restoration of maximal physical functions, this program is designed to develop competent practitioners for contemporary practice.

The program enables students to become physical therapists who seek to prevent injury, impairments, functional limitations, and disabilities; to maintain and promote fitness, health, and quality of life; and to ensure availability, accessibility, and excellence in the

delivery of physical therapy services to the patient. Since physical therapists will be essential participants in the health care delivery system, graduates will be prepared to assume leadership roles in prevention and health maintenance programs and rehabilitation services and to assist in the development of health policy standards tied to physical therapy practice.

In order to meet the changing needs of the health care delivery system, the Doctor of Physical Therapy program seeks to graduate an autonomous practitioner with the expertise and skills to examine, evaluate, and diagnose physical impairments as a result of injury, disease, or disability. After assessment, the physical therapist practitioner will apply appropriate interventions

Doctor of Physical Therapy Entry-Level Program, continued

and treatments and reassess patient progress. This autonomous practitioner will also evaluate patients as to their prognosis and work with other health care professionals to develop a comprehensive treatment plan.

CAREER OPPORTUNITIES

Graduates from this program will practice as physical therapist clinicians in a variety of settings.

DEGREE REQUIREMENTS

This program requires the completion of 133 credits including three major papers: a review of the literature, a case report, and the development of a research plan. See courses by semester starting on page 158.

ADMISSION REQUIREMENTS

Applicants must have a bachelor's degree. Applicants must complete the Graduate Record Examination; have an academic record that demonstrates a balance of coursework in the humanities, social sciences, and natural sciences, including at least two laboratory courses in biology, chemistry, and physics; evidence of clinical observations in three distinct physical therapy practice settings (total of 24 hours); a strong GPA in the prerequisite natural science courses; competence in conveying ideas in an organized manner through written communication that demonstrates critical and logical thinking; interpersonal communications skills; evidence of community service and leadership; and two letters of reference from licensed physical therapists.

See general admission section, page 156.

DOCTOR OF PHYSICAL THERAPY TUITION

Under the D.P.T. Secured Tuition Plan, students pay a flat rate of tuition each term based on a total tuition amount that is secured for the duration of their studies. Students must maintain consecutive registrations (excluding maintenance of matriculation and/or leave of absence) in order to be eligible for the flat tuition rate guaranteed at the time of their matriculation.

New tuition rates for the D.P.T. Secured Tuition Plan are posted on our website: www.steinhardt.nyu.edu/pt.

Doctor of Physical Therapy for Practicing Physical Therapists Program

DIRECTOR

Ann Goerdts

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DEGREE

D.P.T.

FACULTY

Aqua, Batavia, Becker,
Goerdts, Gutierrez,
Iannuzzi, Ling,
Mehreteab, Moffat,
Rao, Weaver

ADJUNCT FACULTY

Accettola, Ciotoli,
Cooper, Edelstein,
Friedman, Garritan,
Haas, Keller,
Keohane, Kharlamb,
Levy-Santoro, Lim,
Malyango, McGuinness,
O'Brien, Pensavalle,
Roy, Wishe, Zane

The Doctor of Physical Therapy (D.P.T.)

for Practicing Physical Therapists Program is designed to educate professional physical therapists who are knowledgeable, self-assured, adaptable, reflective, humanistic, and service-oriented and who, by virtue of critical thinking, lifelong learning, and ethical values, render independent judgments concerning patient/client needs.

The D.P.T. for Practicing Physical Therapists Program will enable currently practicing, licensed physical therapists to upgrade their clinical knowledge and skills to today's entry-level professional doctoral degree. Practicing physical therapists who were educated at the certificate, baccalaureate, or master's level will have the opportunity to increase their knowledge and skills in the areas of anatomy, exercise science, physical therapist examinations and interventions, business practices, and critical inquiry. Upgrading the knowledge and skill of practicing physical therapists to the doctoral level (D.P.T.) will enable them to better serve their patients and clients.

DEGREE REQUIREMENTS

This part-time program requires a total of 36 credits beyond the baccalaureate degree.

ADMISSION REQUIREMENTS

Only physical therapists with a minimum of a baccalaureate degree will be considered as candidates for matriculation in the Doctor of Physical Therapy for Practicing Physical Therapists Program. Applicants must have a strong grade unit average; competence in conveying ideas in an organized manner through written communication; two letters of reference; and scores from the Graduate Record Examination. Applicants whose first language is not English are required to take the Test of English as a Foreign Language (TOEFL). All records from foreign colleges must be submitted for credentials evaluation in accordance with University policy.

See general admission section, page 156.

Research in Physical Therapy

DIRECTOR

Wen Ling

380 Second Avenue,
4th Floor
212-998-9415

DEGREE

Ph.D.

FACULTY

Batavia, Gutierrez,
Ling, Moffat, Rao

ADJUNCT FACULTY

Haas, Magill, McHugh,
Raghavan

The Ph.D. program is currently not accepting applications for admission.

The formulation of theory-based studies of human motion in healthy and physically challenged persons that make a contribution to the body of pathokinesiological literature are fundamental to the physical therapy doctoral program. The Ph.D. program emphasizes the study of kinesiology, the measurement of human motion, and issues in motor control. Studies are encouraged that contribute to the alleviation of physical disabilities. Preparation in research design and methodology is emphasized along with pathokinesiology practicum in research settings under the supervision of experienced researchers in metropolitan New York and New Jersey human performance laboratories.

CAREER OPPORTUNITIES

Of the 61 graduates of this doctoral program, all are actively engaged in teaching and research in physical therapy in institutions of higher learning in the United States as well as Nigeria, Kuwait, Egypt, Thailand, and Taiwan. For example, Dr. Isaac Owoye is conducting research and teaching at the University of Ibadan, Nigeria; Dr. Chuchuka Enwemeka is the dean of the College of Health Sciences, University of Wisconsin-Milwaukee, and has developed an international reputation in research on the healing of connective tissues; Dr. Prapos Pothongsunun is the chair of the Physical Therapy Program at Chiang Mai University, Thailand; and Dr. Sue Ann Sisto, director of research in the Department of Physical Therapy, Stony Brook University, has received federal and private funding to conduct research addressing movement disorders of individuals with disabilities.

DEGREE REQUIREMENTS

Foundation Courses (6 units): from, for example, Foundations of Education: Educational Sociology *SOED-GE.2400*, Educational Psychology *APSY-GE.1014*, Introduction to Philosophy of Education *PHED-GE.2003*.

Seminar (3 units): Departmental Seminar *PT-GE.3006*.

Content Preparation in Study of

Human Motion (18 units): Practicum in Pathokinesiology Research I and II *PT-GE.3001, 3002*, Analysis and Synthesis of Human Motion I *PT-GE.2116*, Analysis and Synthesis of Human Motion II *PT-GE.2118*, Measurement and Evaluation of Human Motion I *PT-GE.2187*, Measurement and Evaluation of Human Motion II *PT-GE.2188*.

Cognate Courses (6 units): Investigative Skills (3 units): Experimental and Quasi-Experimental Design and Analysis Research *RESCH.2134*.

Research Electives (15 units): Gross Human Anatomy *PT-GE.2120*, Division of Health Seminar *E45.3005*, Principles of Empirical Research *RESCH-GE.2131*, Educational Statistics I and II *RESCH-GE-GE.2001, 2002*, Advanced Quantitative Methods I and II *RESCH-GE.2081, 2082*.

Dissertation Proposal Seminar (3 units): Dissertation Proposal Seminar I *RESCH-GE.3001*, Dissertation Proposal Seminar: Physical Therapy *PT-GE.3003*.

SPECIAL OPPORTUNITIES

Several clinical research laboratories are available to doctoral candidates to work under the supervision of an experienced researcher in physical therapy: Arthur J. Nelson Jr. Human Performance Laboratory, NYU Department of Physical Therapy; Motor Recovery Laboratory of the NYU Rusk Institute of Rehabilitation Medicine; and Rehabilitation Engineering Research Center, VA Medical Center, New York City.

ADMISSION REQUIREMENTS

The Ph.D. program is currently not accepting applications for admission.

Candidates for admission must be graduates of an accredited physical therapy program, possess a master's degree, and submit positive recommendations from two graduate faculty members.

See general admission section, page 156.

RESEARCH FACILITIES

The Arthur J. Nelson Jr. Human Performance Laboratory houses state-of-the-art equipment for research in the neuromuscular, musculoskeletal, and cardiopulmonary areas, including a computerized 3-D motion analysis system with three force plates and an eight-channel, tethered electromyographic unit; an isokinetic dynamometer; a four-channel, hard-wired kinesiological electromyographic unit; a computerized pressure mat for gait analysis; a plantar pressure shoe insert system; and an oxygen analyzer with electrocardiogram and ergonometer.

Courses

The courses listed herein are to be offered in 2011–2013.

Please be advised that licensing agencies and placement facilities in your field of study may require that you undergo a criminal background check, the results of which the agency or facility must find acceptable prior to placement or licensure.

PHYSICAL THERAPY/PT

ADVANCED CERTIFICATE IN ORTHOPEDIC PHYSICAL THERAPY

Advanced Physical Therapy Examination and Intervention Skills of the Musculoskeletal System I
PT-GE.2601 45 hours: 3 units. Fall.

Advanced Physical Therapy Examination and Intervention Skills of the Musculoskeletal System II
PT-GE.2602 45 hours: 3 units. Spring.

Advanced Physical Therapy Examination and Intervention Skills of the Musculoskeletal System III
PT-GE.2603 45 hours: 3 units. Summer.

Seminar: Orthopedic Physical Therapy
PT-GE.2604 30 hours: 2 units. Summer.

Advanced Evidence-Based Orthopedic Physical Therapy
PT-GE.2605 30 hours: 2 units. Spring.

Advanced Anatomy, Physiology, and Pathophysiology of the Musculoskeletal System
PT-GE.2610 45 hours: 3 units. Fall.

Mentored Orthopedic Physical Therapy Clinical Practice I
PT-GE.2611 532–537 hours: 0 units. Fall.

Mentored Orthopedic Physical Therapy Clinical Practice II
PT-GE.2612 532–537 hours: 0 units. Spring.

Mentored Orthopedic Physical Therapy Clinical Practice III
PT-GE.2613 532–537 hours: 0 units. Summer.

M.A./PH.D. PHYSICAL THERAPY

Research in Physical Therapy I
PT-GE.2016 30 hours: 3 units. Fall, spring.

Research in Physical Therapy II
PT-GE.2018 30 hours: 3 units. Spring, summer.

Analysis and Synthesis of Human Motion I
PT-GE.2116 45 hours: 3 units. Fall.
Prerequisites: courses in human anatomy, kinesiology, and physiology.

Analysis and Synthesis of Human Motion II
PT-GE.2118 45 hours: 3 units. Spring.
Prerequisites: courses in human anatomy, kinesiology, and physiology.

Measurement and Evaluation of Human Motion I
PT-GE.2187 45 hours: 3 units. Fall.

Measurement and Evaluation of Human Motion II
PT-GE.2188 45 hours: 3 units. Spring.
Prerequisite: PT-GE.2187.

Measurement and Evaluation of Human Motion III
PT-GE.2189 48 hours: 3 units. Summer.
Prerequisites: PT-GE.2187 and PT-GE.2188.

Independent Study
PT-GE.2300 Variable credit.

Practicum in Pathokinesiology Research I
PT-GE.3001 90 hours: 3 units. Fall.

Practicum in Pathokinesiology Research II
PT-GE.3002 90 hours: 3 units. Spring.

Departmental Seminar
PT-GE.3006 30 hours: 3 units. Spring.

Doctoral Colloquium: Physical Therapy
PT-GE.3010 15 hours: 1 unit. Fall, spring. Pass/fail.

DOCTOR OF PHYSICAL THERAPY

Summer

Histology/General Pathology
PT-GE.2004 45 hours: 3 units.

CPR/First Aid Advanced Emergency Techniques
PT-GE.2030 30 hours: 2 units. Pass/fail.

Gross Human Anatomy
PT-GE.2120 60 hours: 4 units.
\$65 laboratory fee required.

Professional Behavior
PT-GE.2281 30 hours: 2 units.

Fall, First Year

The Physical Therapist as an Educator/Communicator
PT-GE.2020 30 hours: 2 units.

Applied Anatomy/Physiology of the Cardiopulmonary System
PT-GE.2024 45 hours: 3 units.

Life Span Development
PT-GE.2209 45 hours: 3 units.

Physical Agents and Mechanical Modalities (including Aseptic Techniques/Infection and Disease Control)
PT-GE.2215 60 hours: 4 units.

Exercise Physiology
PT-GE.2225 60 hours: 4 units.

Applied Anatomy/Physiology of the Musculoskeletal System
PT-GE.2230 45 hours: 3 units.

Spring, First Year

Manual Techniques
PT-GE.2008 45 hours: 3 units.

Clinical Sciences/Pathology/Imaging/Pharmacology of the Cardiopulmonary System
PT-GE.2026 60 hours: 4 units.

Kinesiology/Biomechanics/Ergonomics
PT-GE.2220 60 hours: 5 units.

Principles of Exercise
PT-GE.2227 45 hours: 3 units.

Fitness Theory and Practice
PT-GE.2229 30 hours: 2 units.

Critical Inquiry and Clinical Decision Making I
PT-GE.2286 30 hours: 2 units.

Summer, First Year

Clinical Affiliation I
PT-GE.2450 40 hours per week for 6 weeks: 2 units.

Fall, Second Year

Clinical Sciences/Pathology/Pharmacology/Imaging of the Musculoskeletal System
PT-GE.2231 60 hours: 4 units.

Applied Anatomy/Physiology of the Neuromuscular System

PT-GE.2232 45 hours: 3 units.

Physical Therapy Examinations of the Cardiopulmonary System

PT-GE.2250 60 hours: 4 units.

Physical Therapy Examinations of the Musculoskeletal System

PT-GE.2251 60 hours: 4 units.

Critical Inquiry and Clinical Decision Making II

PT-GE.2287 30 hours: 2 units.

Clinical Observation I

PT-GE.2455 1 day per week for 12 weeks: 1 unit.

Spring, Second Year

Physical Therapy Interventions/Prevention Programs/Wellness Programs for the Cardiopulmonary System

PT-GE.2260 60 hours: 4 units

Physical Therapy Interventions/Prevention Programs/Wellness Programs for the Musculoskeletal System

PT-GE.2261 60 hours: 4 units.

Electrotherapeutic Modalities

PT-GE.2218 45 hours: 3 units.

Prescription, Application, and, as Appropriate, Fabrication of Assistive, Adaptive, Orthotic, Protective, Supportive, and Prosthetic Devices and Equipment

PT-GE.2219 45 hours: 3 units.

Clinical Sciences/Pathology/Pharmacology/Imaging of the Neuromuscular System

PT-GE.2242 60 hours: 4 units.

Clinical Observation II

PT-GE.2456 1 day per week for 12 weeks: 1 unit.

Summer, Second Year

Clinical Affiliation II

PT-GE.2451 40 hours per week for 8 weeks: 3 units.

Fall, Third Year

Applied Anatomy/Physiology of the OB/GYN, Integumentary, and Endocrinology Systems

PT-GE.2233 45 hours: 3 units.

Clinical Sciences/Pathology/Pharmacology/Imaging of the OB/GYN, Integumentary, and Endocrinology Systems

PT-GE.2243 60 hours: 4 units.

Physical Therapy Examinations of the Neuromuscular System

PT-GE.2252 60 hours: 5 units.

Physical Therapy Examinations of the OB/GYN, Integumentary, and Endocrinology Systems

PT-GE.2253 45 hours: 3 units.

Critical Inquiry/Clinical Decision Making III

PT-GE.2288 30 hours: 2 units.

Clinical Observation III

PT-GE.2457 1 day per week for 12 weeks: 1 unit.

Spring, Third Year

The Physical Therapist as an Administrator/Delegator/Manager

PT-GE.2019 30 hours: 3 units.

Physical Therapy Interventions/Prevention Programs/Wellness Programs for the Neuromuscular System

PT-GE.2262 90 hours: 6 units.

Physical Therapy Interventions/Prevention Programs/Wellness Programs for the OB/GYN, Integumentary, and Endocrinology Systems

PT-GE.2263 60 hours: 4 units.

Business Practices/Reimbursement/Marketing/Technology/Management of Care Delivery System

PT-GE.2295 60 hours: 4 units.

Clinical Observation IV

PT-GE.2458 1 day per week for 12 weeks: 1 unit.

Summer, Third Year

Clinical Affiliation III

PT-GE.2452 40 hours per week for 16 weeks: 6 units.

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