Counseling and Applied Educational Psychology Faculty

DISTINGUISHED PROFESSOR
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PROFESSORS
Mary B. Ballou, PhD
Debra L. Franko, PhD
Karin N. Lifter, PhD
Emanuel J. Mason, EdD
Barbara F. Okun, PhD
Tracy L. Robinson, PhD
James F. Scorzelli, PhD
Ena Vazquez-Nuttall, EdD

ASSOCIATE PROFESSORS
Carmen G. Armengol, PhD
Deborah F. Greenwald, PhD
Vanessa D. Johnson, PhD
Louis J. Kruger, PsyD
Chieh Li, EdD
William G. Quill, PhD
William Sanchez, PhD

ASSISTANT PROFESSORS
Jessica Blom-Hoffman, PhD
George F. Thompson, PhD
Robert J. Volpe, PhD

LECTURER
Gila Kornfeld-Jacobs, PhD

Medical Laboratory Science Faculty
Mary Louise Turgeon, EdD, MT(ASCP), CLS(NCA), Clinical Professor, Acting Chair, and Program Director

ASSISTANT CLINICAL PROFESSOR
Sally Ball, PhD, MT(ASCP)

CLINICAL INSTRUCTOR
Carol Finn, MS, M(ASCP)

LABORATORY COORDINATOR
Judith Baronas, BS, MT(ASCP)

Cooperative Education Faculty
Rosemarie DiMarco, MS, Associate Coordinator and Director

SENIOR COORDINATOR
Mark L. Yorra, MS, RPh

ASSOCIATE COORDINATORS
Robert J. Blaser, MS, RPh
Alicia A. Canali, MEd
Jacqueline Diani, MEd

ASSISTANT COORDINATORS
Mary Carney, MSN
Lisa M. Foster, MS

The programs in Bouvé College of Health Sciences combine cooperative education experiences with highly innovative academic curricula that are designed to meet the demand for well-educated allied health professionals, nurses, and pharmacists. The college prepares students to become effective professional practitioners, enter graduate schools, and work in many areas responsible for the delivery of health care.

There are three schools within the Bouvé College of Health Sciences: the School of Nursing, the School of Pharmacy, and the School of Health Professions, which comprises the following majors: athletic training, cardiopulmonary and exercise sciences, health science, medical laboratory science, physical therapy, and speech-language pathology and audiology. The college offers students a health-care education that features a curriculum of highly relevant and closely integrated basic courses in the physical, biological, behavioral, and administrative sciences; on-site involvement in clinical patient
care, including early and advanced pharmacy practice experiences and clinical affiliations in nursing, physical therapy, and other health professions; a cooperative education work program; and a commitment to the search for and advancement of new and progressive concepts, ideas, and philosophies of education and professional practice.

Each of the programs offered by the college is accredited by the appropriate professional group. The college is a member of the Association of Schools of Allied Health Professions, the American Association of Colleges of Nursing, and the American Association of Colleges of Pharmacy.

Academic Requirements

Students are responsible for following the curriculum plan for their major, co-op division, and graduation year. Students are responsible for monitoring their own progress through the curriculum by registering for the courses stipulated by their curriculum plan, knowing course prerequisites, regularly checking the degree audit system, and knowing the sanctions for unsatisfactory academic progress. Any exceptions to a student’s curriculum plan must be approved by their academic advisor.

College Academic Standards

Students must receive a grade of C or better in professional courses.

Professional courses:

Required courses taught within the major/college as identified by unit/faculty: ATP, BHS, CAP, CES, MLS, NUR, PMD, PSC, PTH, SLA, TOX

Courses from the above-listed departments that are taken as electives are exempt from the C or better rule and the University’s minimum satisfactory grade will be accepted.

Students must receive a grade of C– or better in selected professional prerequisites.

Professional prerequisites:

Athletic Training: BIO, CHM, MTH, PHY, PSC
Cardiopulmonary and Exercise Sciences: BIO, CHM, MTH, PHY, PSC
Health Science: BIO, CHM, MTH
Medical Laboratory Science: BIO, CHM, MTH, PHY
Nursing: BIO, CHM, MTH
Pharmacy: BIO, CHM, PHY, MTH

Effective with the fall 2005 entering class, pharmacy students must receive a grade of C or better in professional prerequisites beginning in the second year of the curriculum.

Physical Therapy: BIO, CES, CHM, MTH, PHY, PSY

Effective with the fall 2006 entering class, physical therapy students must receive a grade of C or better in professional prerequisites beginning in the second year of the curriculum.

Speech-Language Pathology and Audiology: BIO, MTH, PHY, PSY U101

Courses from the above-listed departments that are taken as electives are exempt from the C– or better rule and the University’s minimum satisfactory grade will be accepted.

For all other courses:
The University’s minimum passing grade for the course will be accepted. Please note: The University requires a minimum grade of C for ENG U111 and ENG U306.

Progression within Bouvé

• First-year students must complete at least 27 semester hours and meet all major prerequisite course requirements in order to progress to sophomore status. First-year students who earn fewer than the semester hours stipulated by the curriculum plan for their major must make up the difference prior to graduation.

• In order to progress into the subsequent year of professional courses, students must have completed all professional courses with a grade of C or better and all professional prerequisites with a grade of C– or better (except for pharmacy and physical therapy, which require a C in professional prerequisites beginning in the second year).

• Effective with the fall 2005 entering class, pharmacy students must receive a grade of C or better in professional prerequisites beginning in the second year, have satisfactorily completed all courses in years one and two of the curriculum, and have an overall GPA of 2.700 or better to progress from second- to third-year status.

• Effective with the fall 2006 entering class, physical therapy students must receive a grade of C or better in professional prerequisites beginning in the second year and have a 2.700 overall GPA to enter the graduate phase of the Doctor of Physical Therapy (DPT) program. Students must maintain a 3.000 overall GPA during the graduate phase of the DPT program in order to progress and graduate with the DPT.

• Physical therapy students entering prior to fall 2006 are required to have a 2.670 overall GPA to progress from the fourth to the fifth year of the program. Students must maintain an overall GPA of 3.000 during the sixth year of the program.

• Students who incur an incomplete grade in a prerequisite course must obtain approval from their academic advisor, upon consultation with the department faculty, prior to progression into the subsequent course(s).

• Students dismissed administratively from the English Language Center are not eligible for the Bouvé program to which they were conditionally admitted.

Criteria for University Academic Probation

Note: Notation of academic probation will appear on internal record but not on permanent transcript.

Students in the Bouvé College of Health Sciences will be placed on academic probation effective the following academic semester for any of the reasons noted below:
First-year Students:

- Not earning at least 12 semester hours in the second semester of the first year.
- Not maintaining an overall cumulative GPA of at least 1.800 at the end of the two semesters of the first-year curriculum.

Upperclass and Transfer Students:

- Not earning at least 12 semester hours in the semester just completed.
- Not maintaining an overall cumulative GPA of at least 2.000 at the end of each academic semester.

Academic Dismissal from Major

Students in the Bouvé College of Health Sciences will be dismissed from their major effective the following academic semester for any of the reasons noted below:

- Failure to earn a grade of C or better in three professional courses, regardless of remediation. Lecture and clinical/lab components for the same class are considered as one professional course failure.
- Failure to earn the minimum required grade in the same course twice.

Note: Students dismissed from their major but who are otherwise in good standing with the University are allowed to remain at Northeastern University for up to two semesters as a provisional Bouvé student, by the end of which the student is expected to move into a new major. Otherwise, the student will be dismissed from the University.

Academic Dismissal from University

Students who remain on probation after two academic semesters may be dismissed from the University. Notification of this academic dismissal action will appear on the permanent transcript.

Academic Appeals

Students who believe that they were erroneously, capriciously, or otherwise unfairly treated in an academic or cooperative education decision may petition to appeal the decision. Refer to the Bouvé Undergraduate Student Manual, which details the Bouvé College of Health Sciences Appeals Process, and the Northeastern University Student Handbook, which details the University Undergraduate Student Academic Appeals Procedures.

ATHLETIC TRAINING

www.bouve.neu.edu/programs/at/index.php

Jamie L. Musler, MS, ATC
Clinical Instructor and Program Director

ASSISTANT PROFESSORS

Paul K. Canavan, PhD, PT, ATC, CSCS
Suann Maurer-Starks, EdD, ATC

CLINICAL INSTRUCTORS

James E. Leone, MS, ATC, CSCS
Adam Thomas, MA, ATC
Kimberly Ashton Wise, MS, ATC, Coordinator of Clinical Education

The five-year athletic training education program is designed for students who are interested in an allied health-care profession specializing in the health care of active patients. Working under a physician's supervision, athletic trainers are members of the sports medicine field who specialize in the prevention, examination and diagnosis, management, treatment, and rehabilitation of injuries and illnesses. Athletic trainers function as integral members of the health-care team in secondary schools, colleges and universities, professional sports programs, sports medicine clinics, hospitals, corporate and industrial settings, and other health-care facilities.

Students may apply from high school or apply for transfer into the athletic training education program after successfully completing their first year of academic study. To be accepted into the program, transfer applicants must demonstrate an established academic record with a solid foundation in the sciences. In addition, the athletic training education program has minimum physical, emotional, and cognitive skill requirements considered necessary for all students admitted to the program. These requirements are outlined in the Technical Standards that can be found on the program Web site and from the program office. Candidates for selection to the athletic training education program will be required to verify they understand and meet these Technical Standards or that they believe, with certain accommodations, they can meet the standards. It is the sole responsibility of the student to notify the Disability Resource Center if they feel accommodations are needed.

Students in the program take courses designed to develop competencies in the following domains: risk management and injury prevention, pathology of injuries and illnesses, orthopedic clinical examination and diagnosis, acute care of injury and illness, pharmacology, therapeutic modalities, conditioning and rehabilitative exercise, medical conditions and disabilities, nutritional aspects of injury and illness, psychosocial intervention and referral, health-care administration, and professional development and responsibilities. The athletic training education program is committed to the advancement of scholarship by implementing evidence-based practice into didactic, clinical, and cooperative education. In addition, students are required to fulfill clinical education requirements in four structured clinical affiliations during academic semesters. These affiliations may include Northeastern University, other colleges, universities, and high schools as well as clinics and medical facilities in the Boston area. To progress in the program, students must maintain acceptable standards of scholarship, academic performance, and psychomotor development as outlined in this catalog and the student handbook.

The program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE)
Students who graduate from the athletic training education program are eligible to sit for the Board of Certification examination for athletic trainers and may be eligible for state licensure in those states that require licensure for athletic trainers. See pages 262–264 for course descriptions.

**BS in Athletic Training**

**SEMESTER 1**

**Athletic Health-Care Overview**  
Complete the following course with a grade of C or higher:  
ATP U106 Overview of Athletic Health Care 2 SH

**Freshman Seminar**  
Complete the following course:  
BHS U100 College: An Introduction 1 SH

**Anatomy and Physiology 1**  
Complete the following course with corresponding lab:  
BIO U117 Integrated Anatomy and Physiology 1 4 SH  
with BIO U118 Lab for BIO U117 1 SH

**Chemistry**  
Complete the following course with corresponding lab:  
CHM U101 General Chemistry for Health Sciences 4 SH  
with CHM U102 Lab for CHM U101 1 SH

**Calculus**  
Complete the following course:  
MTH U141 Calculus 1 4 SH

**SEMESTER 2**

**Clinical Practice Skills**  
Complete the following course with corresponding lab:  
ATP U120 Clinical Practice Skills in Athletic Training 3 SH  
with ATP U121 Lab for ATP U120 1 SH

**Application of Protective Devices**  
Complete the following course:  
ATP U122 Lab: Application of Protective Devices 1 SH in Athletic Training

**Anatomy and Physiology 2**  
Complete the following course with corresponding lab:  
BIO U119 Integrated Anatomy and Physiology 2 4 SH  
with BIO U120 Lab for BIO U119 1 SH

**Introductory English**  
Complete the following course with a grade of C or higher:  
ENG U111 College Writing 4 SH

**Physics 1**  
Complete the following course with corresponding lab:  
PHY U145 Physics for Life Sciences 1 4 SH  
with PHY U146 Lab for PHY U145 1 SH

**SEMESTER 3**

**Therapeutic Modalities**  
Complete the following course with corresponding lab:  
ATP U310 Therapeutic Modalities 3 SH  
with ATP U311 Lab for ATP U310 1 SH

**Therapeutic Exercise**  
Complete the following course with corresponding lab:  
ATP U320 Therapeutic Exercise 3 SH  
with ATP U321 Lab for ATP U320 1 SH

**Athletic Training Affiliation 1**  
Complete the following course:  
ATP U941 Athletic Training Clinical Affiliation 1 3 SH

**Clinical Kinesiology**  
Complete the following course with corresponding lab:  
CES U504 Clinical Kinesiology 4 SH  
with CES U505 Lab for CES U504 1 SH

**SEMESTER 4 (SUMMER)**

**Neuromuscular and Cardiovascular Programming**  
Complete the following course:  
ATP U330 Neuromuscular and Cardiovascular Programming 2 SH

**Evaluation: Head and Spine**  
Complete the following course with two corresponding labs:  
ATP U520 Evaluation: Head and Spine 4 SH  
with ATP U521 Evaluation: Head and Spine Skills Lab 1 SH  
with ATP U522 Evaluation: Head and Spine Anatomy Lab

**SEMESTER 5**

**Evaluation: Lower Extremity**  
Complete the following course with two corresponding labs:  
ATP U500 Evaluation: Lower Extremity 4 SH  
with ATP U501 Evaluation: Lower Extremity Skills Lab 1 SH  
with ATP U502 Evaluation: Lower Extremity Anatomy Lab

**Athletic Training Affiliation 2**  
Complete the following course:  
ATP U942 Athletic Training Clinical Affiliation 2 3 SH

**Advanced Writing in the Disciplines**  
Complete the following course with a grade of C or higher:  
ENG U306 Advanced Writing in the Health Professions 4 SH

**Psychology**  
Complete the following course:  
PSY U101 Foundations of Psychology 4 SH

**SEMESTER 6 (SUMMER)**

**Evaluation: Upper Extremity**  
Complete the following course with two corresponding labs:  
ATP U510 Evaluation: Upper Extremity 4 SH  
with ATP U511 Evaluation: Upper Extremity Skills Lab 1 SH  
with ATP U512 Evaluation: Upper Extremity Anatomy Lab

**Health Counseling**  
Complete the following course:  
CAP U502 Health Counseling 3 SH
SEMESTER 7

**Athletic Training Affiliation 3**
Complete the following course:
ATP U943 Athletic Training Clinical Affiliation 3 3 SH

**Nutrition**
Complete the following course:
BHS U105 Nutrition 4 SH

**Exercise Physiology**
Complete the following course with corresponding lab:
CES U500 Exercise Physiology 1 4 SH
with CES U501 Lab for CES U500 1 SH

**Pharmacology**
Complete the following course:
PSC U340 Pharmacology for the Health Professions 4 SH

SEMESTER 8

**Disease and Disabilities**
Complete the following course:
ATP U530 Disease and Disabilities in Athletics 3 SH

**Research**
Complete the following course:
BHS U450 Health-Care Research 4 SH

**Comparative Study of Cultures**
Complete the following course (which satisfies the NU Core comparative study of cultures requirement):
SOA U101 Peoples and Cultures 4 SH
or complete any course that satisfies the NU Core comparative study of cultures requirement as described on page 24.

**Athletic Training Affiliation 4**
Complete the following course:
ATP U944 Athletic Training Clinical Affiliation 4 3 SH

SEMESTER 9

**Administration**
Complete the following course:
ATP U600 Administration in Athletic Health Care 4 SH

**Senior Experience**
Complete the following course:
ATP U946 Athletic Training Senior Experience 2 SH

**Free Electives**
Complete two courses outside athletic training.

ATHLETIC TRAINING MAJOR GRADE REQUIREMENT
A grade of C or higher is required in all ATP courses.

NU CORE REQUIREMENTS
See page 24 for requirement list.

GENERAL ELECTIVES
Additional courses taken beyond college and major course requirements to satisfy graduation credit requirements.

COOPERATIVE EDUCATION

UNIVERSITY-WIDE REQUIREMENTS
133 total semester hours required
Minimum 2.000 GPA required
declared focus. Students may use the electives to undertake a formal minor in an academic area that is related to and complements their health science studies. The entire academic experience is drawn together through a capstone project during the senior year. The capstone project is intended to provide students with a structured opportunity to broaden, deepen, and integrate the knowledge and skills acquired in prior courses and experiential activities. See pages 264–266 for course descriptions.

**Minor in Health Sciences**
The minor in health sciences is designed for undergraduate students from any discipline across the University wishing to expand and apply their understanding in health-science-related areas. The minor is comprised of five courses (20 credits) selected from courses offered within the health sciences major. The selection of courses is done in consultation with the health science program faculty. See pages 264–266 for course descriptions.

**Minor in Exercise Sciences**
This minor in exercise physiology is for undergraduate students from any discipline across the University wishing to expand their understanding of human physiology. Exercise physiology is a discipline that examines the short- and long-term responses to exercise and benefits of exercise training for healthy persons as well as persons with chronic diseases such as heart disease, pulmonary diseases, diabetes, obesity, etc. Undergraduate students from many disciplines could broaden their understanding of human physiology and the role of exercise in health promotion, disease prevention, and rehabilitation with a minor in exercise physiology. Students who elect a minor in exercise physiology may then apply to the MS in clinical exercise physiology upon graduation. See pages 274–277 for course descriptions.

**BS in Health Science**
*Note:* Students pursuing premed track should consult advisor for additional guidance.

**YEAR 1**

**American Health Care**
Complete the following course:
BHS U260  The American Health-Care System  4 SH

**Freshman Seminar**
Complete the following course:
BHS U100  College: An Introduction  1 SH

**General Biology 1 and 2**
Complete the following two courses with corresponding labs:
BIO U111  General Biology 1  4 SH
with BIO U112  Lab for BIO U111  1 SH
BIO U113  General Biology 2  4 SH
with BIO U114  Lab for BIO U113  1 SH

**Mathematics**
Complete the following course:
MTH U141  Calculus 1  4 SH

**YEAR 2**

**Community and Public Health**
Complete the following course:
BHS U350  Community and Public Health  4 SH

**Anatomy and Physiology 1 and 2**
Complete the following two courses with corresponding labs:
BIO U117  Integrated Anatomy and Physiology 1  4 SH
with BIO U118  Lab for BIO U117  1 SH
BIO U119  Integrated Anatomy and Physiology 2  4 SH
with BIO U120  Lab for BIO U119  1 SH

**Statistics and Software**
Complete the following course:
MTH U280  Statistics and Software  4 SH

**Nutrition**
Complete the following course:
BHS U105  Nutrition  4 SH

**Professional Development for Co-op**
Complete the following course:
COP U101  Professional Development for Co-op  1 SH

**Basic Clinical Skills**
Complete the following course with corresponding lab:
BHS U200  Basic Skills for the Health-Care Professional  2 SH
with BHS U201  Lab for BHS U200  1 SH

**Program Electives 1 and 2**
Complete two courses selected in consultation with your advisor as part of your declared track of study.

**YEAR 3 (4-YEAR OPTION)**

**YEARS 3 AND 4 (5-YEAR CO-OP OPTION)**

**Advanced Writing in the Health Professions**
Complete the following course with a grade of C or higher:
ENG U306  Advanced Writing in the Health Professions  4 SH

**General Chemistry 1**
Complete one of the following courses with corresponding lab:
CHM U101  General Chemistry for Health Sciences  4 SH
with CHM U102  Lab for CHM U101  1 SH
CHM U211  General Chemistry 1  4 SH
with CHM U212  Lab for CHM U211  1 SH

**General Chemistry 2**
Complete one of the following courses with corresponding lab:
CHM U104  Organic Chemistry for Health Sciences  4 SH
with CHM U105  Lab for CHM U104  1 SH
CHM U214  General Chemistry 2  4 SH
with CHM U215  Lab for CHM U214  1 SH

**Foundations of Psychology**
Complete the following course:
PSY U101  Foundations of Psychology  4 SH

**College Writing**
Complete the following course with a grade of C or higher:
ENG U111  College Writing  4 SH

**YEAR 4**

**Community and Public Health**
Complete the following course:
BHS U350  Community and Public Health  4 SH

**Anatomy and Physiology 1 and 2**
Complete the following two courses with corresponding labs:
BIO U117  Integrated Anatomy and Physiology 1  4 SH
with BIO U118  Lab for BIO U117  1 SH
BIO U119  Integrated Anatomy and Physiology 2  4 SH
with BIO U120  Lab for BIO U119  1 SH

**Statistics and Software**
Complete the following course:
MTH U280  Statistics and Software  4 SH

**Nutrition**
Complete the following course:
BHS U105  Nutrition  4 SH

**Professional Development for Co-op**
Complete the following course:
COP U101  Professional Development for Co-op  1 SH

**Basic Clinical Skills**
Complete the following course with corresponding lab:
BHS U200  Basic Skills for the Health-Care Professional  2 SH
with BHS U201  Lab for BHS U200  1 SH

**Program Electives 1 and 2**
Complete two courses selected in consultation with your advisor as part of your declared track of study.

**YEAR 3 (4-YEAR OPTION)**

**YEARS 3 AND 4 (5-YEAR CO-OP OPTION)**

**Advanced Writing in the Health Professions**
Complete the following course with a grade of C or higher:
ENG U306  Advanced Writing in the Health Professions  4 SH
Communications for Health Professions
Complete the following course:
BHS U300 Communication Skills for the Health Professions 4 SH

Health-Care Research
Complete the following course:
BHS U450 Health-Care Research 4 SH

Moral Problems of Medicine
Complete the following course:
PHL U165 Moral and Social Problems in Health Care 4 SH

Influences on Health and Illness
Complete the following course:
NUR U210 Influences on Health and Illness: A Nursing Perspective 3 SH

Program Electives 3–5
Complete three courses selected in consultation with your advisor as part of your declared track of study.

FINAL YEAR

Race, Ethnicity, and Health (Comparative Study of Cultures)
Complete the following course (which satisfies the NU Core comparative study of cultures requirement):
BHS U520 Race, Ethnicity, and Health in the United States 4 SH

Health-Care Management
Complete the following course:
BHS U511 Health-Care Management 4 SH

Health Policy
Complete the following course:
BHS U515 Health Policy 4 SH

Health Education and Program Planning
Complete the following course:
BHS U540 Health Education and Program Planning 4 SH

Health Science Capstone Project
Complete the following course:
BHS U710 Health Science Capstone 4 SH

Electives
Complete three electives as described below:

ARTS/HUMANITIES
Complete one course in the NU Core, arts/humanities level 1, as described on page 24.

GENERAL ELECTIVES
Complete two general electives.

HEALTH SCIENCE MAJOR GRADE REQUIREMENT
A grade of C or higher is required in all health science courses.

NU CORE REQUIREMENTS
See page 24 for requirement list.

GENERAL ELECTIVES
Additional courses taken beyond college and major course requirements to satisfy graduation credit requirements.

COOPERATIVE EDUCATION
If elected

UNIVERSITY-WIDE REQUIREMENTS
135 total semester hours required
Minimum 2.000 GPA required

Minor in Health Science

REQUIRED COURSES
Complete five of the following courses:
BHS U260 The American Health-Care System 4 SH
BHS U300 Communication Skills for the Health Professions 4 SH
BHS U350 Community and Public Health 4 SH
BHS U450 Health-Care Research 4 SH
BHS U511 Health-Care Management 4 SH
BHS U515 Health Policy 4 SH
BHS U520 Race, Ethnicity, and Health in the United States 4 SH
PHL U165 Moral and Social Problems in Health Care 4 SH

GPA REQUIREMENT
2.000 GPA required in the minor

Minor in Exercise Physiology
A minimum grade of C is required in all courses taken toward the minor.

REQUIRED COURSES
Complete the following five courses with corresponding labs:
BHS U200 Basic Skills for the Health-Care Professional 2 SH
with BHS U201 Lab for BHS U200 1 SH
CES U500 Exercise Physiology 1 4 SH
with CES U501 Lab for CES U500 1 SH
CES U502 Exercise Testing and Prescription 4 SH
CES U504 Clinical Kinesiology 4 SH
CES U520 Exercise Physiology 2 3 SH

GPA REQUIREMENT
2.000 GPA required in the minor

www.bouve.neu.edu/programs/pt/index.php

MEREDITH H. HARRIS, EdD, PT
Associate Professor and Chair

SUSAN LOWE, MS, PT, GCS
Associate Clinical Professor and Associate Chair

ASSOCIATE PROFESSORS
Lorna Hayward, EdD, PT
Maureen Holden, PhD, PT
Robert Sikes, PhD

ASSISTANT PROFESSORS
Paul K. Canavan, PhD, PT, ATC, CSCS
Karen J. Hutchinson, PhD, PT
Susan H. Ventura, PhD, PT
The physical therapy program prepares its graduates to provide quality patient care in a time of changing concepts, trends, and challenges. Students learn to help clients gain independence and to recognize and manage the emotional and socioeconomic problems that affect recovery.

The program in physical therapy has three admission points: freshman, transfer, or as a graduate student with a baccalaureate degree in a field other than physical therapy. The freshman entry program culminates at the end of six years in a Doctor of Physical Therapy (DPT) degree. Cooperative education is unique to and the hallmark of Northeastern University. Ongoing professional development is accomplished through integration of the combination of classroom and experiential activities. Students of physical therapy alternate semesters of academic study with semesters of cooperative education work experience. Students may be employed as physical therapy co-op students with increasing responsibilities commensurate with their academic studies, or they may perform other health-related duties. These experiences provide an opportunity for the application and reinforcement of the lessons learned in the classroom and laboratory. Prior to graduation, students have twelve months of work experience incorporated into the academic program.

In addition to cooperative education, the program includes twenty-eight weeks of clinical education. Clinical education allows the student to practice professional skills under the supervision of a licensed physical therapist. Clinical sites across the United States, offering a wide range of specialties, participate in our clinical education program. Every effort is made to accommodate individual circumstances, but students should be prepared to travel out of state for two of the three clinical courses. Availability of a car is also required, as most sites are not accessible by public transportation. All expenses associated with clinical education, including travel and housing, are the responsibility of the student. A very small number of sites offer student incentives, including stipends, meals, and housing at low or no cost to the student, but that is becoming increasingly rare.

Physical therapists provide services to patients and clients who have impairments, functional limitations, disabilities, or changes in physical function resulting from injury, disease, or other causes. In addition, physical therapists are involved in wellness initiatives, including screenings, health promotions, and educational activities that promote healthy lifestyles. They perform administrative duties and direct and supervise support personnel. Physical therapists interact and practice in collaboration with a variety of health-care professionals, including, but not limited to, physicians, dentists, nurses, educators, social workers, occupational therapists, speech-language pathologists, and audiologists.

Physical therapists function in a variety of settings, including community and university hospitals; rehabilitation centers; private practices; educational settings; extended-care facilities; freestanding outpatient clinics; home health agencies; and community, state, and federal agencies.

The mission of the Department of Physical Therapy is to graduate clinically competent entry-level practitioners who are cognizant of, and sensitive to, individuals of diverse cultural and ethnic backgrounds and who can practice the art and science of the professional discipline autonomously and as part of an interdisciplinary team. An affirmation to the commitment of lifelong learning provides the basis upon which the department contributes to the advancement of physical therapy knowledge through research and scholarship. The fundamental belief of the department’s faculty is the acceptance of evidence-based practice as the application of scientific evidence to inform and shape clinical practice. In the classroom, students develop problem-solving skills, manual dexterity, and proficiency with equipment and in sound biomechanical and kinesiological techniques.

Students do not need to reapply to the DPT phase of the program, provided they meet the academic standards. To progress in the program, students must maintain acceptable standards of scholarship and academic performance as stated in the academic requirements section of this catalog. Students must develop appropriate motor skills, professional behavior, and emotional maturity.

The program in physical therapy is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

Graduates of the Doctor of Physical Therapy program are eligible to sit for the Physical Therapy Licensure Examination. See pages 443–447 for course descriptions.

**DPT—Doctor of Physical Therapy**

Note: “TBD” stands for “to be determined.” Courses so marked are pending approval.

**YEAR 1**

**Introduction to College**

Complete the following course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS U100</td>
<td>College: An Introduction</td>
<td>1 SH</td>
</tr>
</tbody>
</table>
Introductory English
Complete the following course with a grade of C or higher:
ENG U111 College Writing 4 SH

Mathematics
Complete the following course:
MTH U141 Calculus 1 4 SH

Psychology
Complete the following two courses:
PSY U101 Foundations of Psychology 4 SH
PSY U404 Developmental Psychology 4 SH

Chemistry
Complete the following two courses with corresponding labs:
CHM U101 General Chemistry for Health Sciences 4 SH
with CHM U102 Lab for CHM U101 1 SH
CHM U104 Organic Chemistry for Health Sciences 4 SH
with CHM U105 Lab for CHM U104 1 SH

Free Electives
Complete any two courses outside physical therapy. Only one remedial or education course may be applied to the entire program.

YEAR 2

Professional Development
Complete the following course:
COP U101 Professional Development for Co-op 1 SH

Anatomy and Physiology
Complete the following two courses with corresponding labs:
BIO U117 Integrated Anatomy and Physiology 1 4 SH
with BIO U118 Lab for BIO U117 1 SH
BIO U119 Integrated Anatomy and Physiology 2 4 SH
with BIO U120 Lab for BIO U119 1 SH

Physics
Complete the following two courses with corresponding labs:
PHY U145 Physics for Life Sciences 1 4 SH
with PHY U146 Lab for PHY U145 1 SH
PHY U147 Physics for Life Sciences 2 4 SH
with PHY U148 Lab for PHY U147 1 SH

Statistics
Complete the following course:
MTH U280 Statistics and Software 4 SH

Physical Therapy Foundations
Complete the following two courses with corresponding labs:
BHS U200 Basic Skills for the Health Care Professional 2 SH
with BHS U201 Lab for BHS U200 1 SH
PHT U203 Human Skills Development 2 SH

Comparative Study of Cultures
Complete one course to satisfy the NU Core comparative study of cultures requirement as described on page 24.

Free Electives
Complete any two courses outside physical therapy. Only one remedial or education course may be applied to the entire program.

YEAR 3

Gross Anatomy
Complete the following course with corresponding lab:
PHT U301 Gross Anatomy 4 SH
with PTH U302 Lab for PTH U301 1 SH

Kinesiology
Complete the following course with corresponding lab:
PHT U303 Kinesiology 3 SH
with PTH U304 Lab for PTH U303 1 SH

Professional Seminar 1
Complete the following course:
PHT U305 Physical Therapy Professional Seminar 1 2 SH

Psychosocial Management
Complete the following course:
PHT U404 Psychosocial Considerations for Health Care Professionals 2 SH
or BHS U560 Psychosocial Management 3 SH

Therapeutic Modalities
Complete the following course with corresponding lab:
PHT U204 Therapeutic Modalities 1 SH
with PHT U205 Lab for PHT U204 1 SH

Exercise Physiology
Complete the following course with corresponding lab:
CES U500 Exercise Physiology 1 4 SH
with CES U501 Lab for CES U500 1 SH

Pharmacology
Complete the following course:
TBD

Pathology
Complete the following course:
PHT U310 Pathology 4 SH

Motor Control
Complete the following course with corresponding lab:
PHT U400 Motor Control 3 SH
with PTH U402 Lab for PHT U400 1 SH

Neuroscience
Complete the following course with corresponding lab:
PHT U308 Neuroscience 4 SH
with PHT U309 Lab for PHT U308 1 SH

YEAR 4

Health-Care Research
Complete the following course:
BHS U450 Health-Care Research 4 SH

Cardiovascular and Pulmonary Management
Complete the following course with corresponding lab:
PHT U503 Cardiovascular and Pulmonary Management 4 SH
with PTH U504 Lab for PTH U503 1 SH

Musculoskeletal Management 1
Complete the following course with corresponding lab:
PHT U505 Musculoskeletal Management 1 4 SH
with PHT U506 Lab for PHT U505 1 SH
Integumentary System and Advanced Modalities
Complete the following course with corresponding lab:
PTH U515 Integumentary System and Advanced Modalities
with PTH U516 Lab for PTH U515

Clinical Integration 1: Evidence and Practice
Complete the following course with corresponding lab:
PTH U520 Clinical Integration 1: Evidence and Practice
with PTH U521 Case Studies for PTH U520

Physical Therapy Business Management
Complete the following course:
PTH U351 Physical Therapy Business Management

Advanced Writing in the Disciplines
Complete the following course with a grade of C or higher:
ENG U306 Advanced Writing in the Health Professions

YEAR 5—FALL, SPRING

Physical Therapy Project 1
Complete the following course:
PTH U512 Physical Therapy Project 1

Assistive Technology
Complete the following course with corresponding lab:
PTH G215 Assistive Technology
with PTH G216 Lab for PTH G215

Neurological Management
Complete the following two courses with corresponding labs:
PTH U517 Neurological Management 1
with PTH U518 Lab for PTH U517
PTH G221 Neurological Management 2
with PTH G222 Lab for PTH G221

Administration
Complete the following course:
PTH G219 Physical Therapy Administration

Health Assessment
Complete the following course:
PTH G243 Health Assessment and Wellness

Physical Therapy Project 2
Complete the following course:
PTH U533 Physical Therapy Project 2

Professional Seminar 2
Complete the following course:
PTH U510 Physical Therapy Professional Seminar 2
or TBD

Integrative Physical Therapy Practice
Complete the following course:
PTH U531 Integrative Physical Therapy Practice

Musculoskeletal Management 2
Complete the following course with corresponding lab:
PTH G223 Musculoskeletal Management 2
with PTH G224 Lab for PTH G223

Graduate Elective
Complete one graduate elective.

YEAR 5—SUMMER

Clinical Education 1
Complete the following course:
PTH G441 Clinical Education 1

Differential Diagnosis
Complete the following course:
PTH G240 Differential Diagnosis in Physical Therapy

Advanced Topics
Complete two courses from the following list:
PTH G231 to PTH G237

YEAR 6

Clinical Education
Complete two ten-week clinicals from the following list:
TBD

Diagnostic Imaging
Complete the following course:
PTH G251 Diagnostic Imaging

PHYSICAL THERAPY MAJOR GRADE REQUIREMENT
A grade of C or higher is required in all PTH courses.

NU CORE REQUIREMENTS
See page 24 for requirement list.

GENERAL ELECTIVES
Additional courses taken beyond college and major course requirements to satisfy graduation credit requirements.

COOPERATIVE EDUCATION

UNIVERSITY-WIDE REQUIREMENTS
210 total semester hours required
Minimum 2.000 GPA required