Vagelos College of Physicians and Surgeons, Department of Rehabilitation & Regenerative Medicine

Doctoral Program in Physical Therapy
Bulletin 2019-2022

To communicate with the Program:
ADDRESS INQUIRIES TO:

Columbia University
Program in Physical Therapy
617 West 168th Street
The Georgian, 3rd Floor
New York, NY 10032

Telephone: 212-305-5267
Fax: 212-305-4569
Email: ptadmissions@cumc.columbia.edu

Limitations of Bulletin: This Bulletin is intended to provide information to guide interested students in Columbia University’s Doctor of Physical Therapy degree program. While every effort has been made to ensure the accuracy of the information contained herein, accuracy cannot be absolutely guaranteed, and anyone who needs to rely on any particular matter is advised to verify it independently. The contents of this Bulletin are subject to change, and the Program reserves the right to depart without notice from any policy or procedure referred to in this Bulletin, or to revise and amend this Bulletin in whole or in part at any time. This Bulletin is not intended to and should not be regarded as a contract between the University and any prospective student or other person.
COLUMBIA UNIVERSITY MEDICAL CENTER ADMINISTRATION

UNIVERSITY/CUIMC ADMINISTRATION

Lee C. Bollinger                President of the University
John H. Coatsworth, PhD        Provost of the University
Lee Goldman, MD                 Executive Vice President & Dean of the Facilities of Health Sciences & Medicine
Ronald E. Drusin, MD           Vice Dean for Education, CUIMC
Martha Hooven                   Vice Dean of Administration, CUIMC
Anne Taylor, MD                 Vice Dean of Academic Affairs, CUIMC
Lisa Wade-Stewart               Interim Director, Registration & Finance Services, CUIMC
Tania Kent-James                Director of Housing, CUMC

DEPARTMENT OF REHABILITATION AND REGENERATIVE MEDICINE

Joel Stein, MD                  Chair, Department of Rehabilitation & Regenerative Medicine
Debra Krasinski, PT, PhD        Director, Program in Physical Therapy; Vice Chair, Rehabilitation & Regenerative Medicine; Assistant Dean, Vagelos College of Physicians & Surgeons
Martha Sliwinski, PT, PhD       Associate Director, Student Development, Program in Physical Therapy
Jean Timmerberg, PT, PhD, MHS   Associate Director, Administration, Program in Physical Therapy
Christopher Kevin Wong, PT, PhD  Associate Director, Faculty Development, Program in Physical Therapy

STUDENT FINANCIAL PLANNING

Ellen Spilker, BS               Executive Director
FULL TIME FACULTY

Laurel Daniels Abbruzzese, PT, EdD*
Assistant Professor of Rehabilitation and Regenerative Medicine
Fellow, National Academy of Practice
Certified Exercise Expert for Aging Adults
la110@cumc.columbia.edu
212-305-3916

Clare C. Bassile, PT, EdD
Associate Professor of Rehabilitation and Regenerative Medicine
ccd2120@cumc.columbia.edu
212-305-6804

Colleen M. Brough, PT, DPT, MA
Assistant Professor of Rehabilitation and Regenerative Medicine
Director of Clinical Education
Board Certified Orthopedic Clinical Specialist
cb2877@cumc.columbia.edu
212-342-2989

Cynthia M. Chiarello, PT, PhD
Assistant Professor of Rehabilitation and Regenerative Medicine
cmc3@cumc.columbia.edu
212-305-1650

Wing Fu, PT, PhD
Assistant Professor of Rehabilitation and Regenerative Medicine
Fellow, International Association of Medical Science Educators
wf2214@cumc.columbia.edu
212-305-9835

Michael Johnson, MPT, DSc
Assistant Professor of Rehabilitation and Regenerative Medicine
Board Certified Orthopedic Clinical Specialist and Sports Clinical Specialist
mj2738@cumc.columbia.edu
212-305-1653

Stacy A. Kinirons, PT, PhD, MPH
Assistant Professor of Rehabilitation and Regenerative Medicine
sak2113@cumc.columbia.edu
212-305-1649

Debra C. Krasinski, PT, PhD
Assistant Dean, Director and Associate Professor,
Program in Physical Therapy
Vice Chair, Department of Rehabilitation and Regenerative Medicine
dck6@cumc.columbia.edu
212-305-6907

Jacqueline Montes, PT, EdD
Assistant Professor of Rehabilitation and Regenerative Medicine
Board Certified in Neurologic Physical Therapy
Jm598@cumc.columbia.edu
212-305-8916

Margaret O’Neill, PT, PhD, MPH
Professor of Rehabilitation and Regenerative Medicine
mo2675@cumc.columbia.edu
212-305-6991

Ashwini Rao, EdD, OTR/L, FAOTA
Associate Professor of Rehabilitation and Regenerative Medicine (in the G.H. Sergievsky Center)
Fellow of the American Occupational Therapy Association
akr7@cumc.columbia.edu
212-305-1647

Martha Sliwinski, PT, PhD
Associate Professor of Rehabilitation and Regenerative Medicine
Associate Director, Student Development
ms2814@cumc.columbia.edu
212-305-3628

(continued on following page)

Mahlon K. Stewart, PT, DPT*
Assistant Professor of Rehabilitation and Regenerative Medicine
Director of Clinical Education
Board Certified Geriatric Clinical Specialist
ms2952@cumc.columbia.edu

Jean Fitzpatrick Timmerberg, PT, PhD, MHS
Assistant Professor of Rehabilitation and Regenerative Medicine
Associate Director, Program Administration
Board Certified Orthopedic Clinical Specialist
jt2634@cumc.columbia.edu
Christopher Kevin Wong, PT, PhD*
Associate Professor of Rehabilitation and Regenerative Medicine
Associate Director, Faculty Development
Board Certified Orthopedic Clinical Specialist
ckw7@cumc.columbia.edu
212-305-0683

Lisa Yoon, PT, DPT*
Assistant Professor of Rehabilitation and Regenerative Medicine
Board Certified Pediatric Clinical Specialist
lhy1@cumc.columbia.edu
212-305-5574

*Program Graduate
New York Presbyterian Hospital-Columbia University Medical Center Staff
Serve as lab instructors and/or primary lecturers
(Subject to Change)

Lauri Bishop, PT, DPT
Research Therapist

Helen Chae, PT, DPT
Staff Therapist, MICU/SICU
New York Presbyterian Hospital

Edward Calem, PT, DPT*
Advanced Clinician
Board Certified Orthopedic Clinical Specialist

Lorenzo Casertano, PT, DPT*
Staff Therapist
Certified Strength & Conditioning Specialist
Board Certified Neurologic Clinical Specialist

Brian Gugliuzza, PT, MS
Assistant Supervisor-Outpatient PT
ABPTS, Orthopedic Clinical Specialist
Guild Certified Feldenkrais Practitioner

Rita Hamburgh, PT, MA
Site Director, Rehabilitation & Regenerative Medicine, NYP/Columbia

Evan Johnson, PT, DPT*
Administrative Director, Spine Center
Board Certified Orthopedic Clinical Specialist
Certified Orthopedic Manual Therapist

LaRae Mitchell, PT, DPT
Head Physical Therapist, Allen Hospital/
Daniel & Jane Och Spine Hospital
Board Certified Orthopedic Clinical Specialist

Eric Schaum, PT, DPT
Pre-Op Coordinator/Patient Educator
Department of Orthopedic Surgery
Board Certified Geriatric Clinical Specialist

Kim Shankman, PT, DPT
Lymphedema Specialist

Rami Said, PT, DPT, M. Eng*
Senior Therapist, Spine Center,
Board Certified Orthopedic Clinical Specialist

Andrea Smith, PT, DPT
New York-Presbyterian Hospital
Assistant Head Physical Therapist, Vanderbilt Clinic
Certified in Vestibular Rehabilitation

Kim Stavrolakes, PT, MS
Supervisor, Outpatient Cardiopulmonary Rehabilitation
Board Certified Cardiopulmonary Clinical Specialist

Robin Winn, PT, MS
Supervisor of Pediatric Physical Therapy
Board Certified Pediatric Clinical Specialist
NYP/CHONY

Denise Zakula, PT, MA, MS
Board Certified Cardiopulmonary Specialist, NYP

David Zemmel, PT, MA, MS
Board Certified Cardiopulmonary Specialist, NYP

*Program Graduate
### ADJUNCT FACULTY (EXTERNAL)
External to CUIMC who serve as primary course Instructors and/or lab instructors (subject to change)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Institutions</th>
</tr>
</thead>
</table>
| Lila Abbate, PT, DPT | Director & Owner, New Dimensions Physical Therapy, Manhasset, NY  
Board Certified Orthopedic Clinical Specialist & Women’s Health Clinical Specialist |
| Suzanne Bodian, PT, DPT | CCCE, The New Jewish Home  
Board Certified Geriatric Clinical Specialist |
| William Boissonnault, PT, DPT, DHSc, FAAOMPT, FAPTA | Executive Vice President, Professional Affairs  
American Physical Therapy Association  
Fellow of the American Physical Therapy Association  
| Garth Christensen, PT, DPT, CHT | Adjunct Associate Professor, Hunter College |
| Ashley Cox, PT | Staff Therapist, Wound Care Services, North Shore University Hospital, Manhasset, NY |
| Jeremy Crow, PT, DPT | Director of Clinical Education,  
SPEAR Physical Therapy  
Board Certified Sports Clinical Specialist |
| Demetri Dimitriadis, PT, DPT, CMPT | Owner, Talaria Physical Therapy & Wellness  
Board Certified Orthopedic Clinical Specialist |
| Julie Ehrlich, PT, DPT | Staff Physical Therapist, CCCE  
Orthology, New York, NY |
| Robert Evander, PhD | |
| John Ficucello PT, MS | Supervising Physical Therapist, Spinal Cord Injury/Amputee Unit, Helen Hayes Hospital, West Haverstraw, NY |
| Shantel Firpi, PT, MS | Trainer, Exos, NY, NY |
| Bill Gallagher, PT* | Director, East West Rehabilitation Institute  
Master Clinician in Integrative Rehabilitation  
Mount Sinai Medical Center, NY, NY  
Certified Massage Therapist  
Certified Yoga Instructor |
| Carl Gargiulo, PT, DPT | Owner & Director, Strulowitz & Gargiulo Physical Therapy Rehabilitation, Jersey City, NJ  
Board Certified Orthopedic Clinical Specialist |
| Cameron Gomez, PT, DPT* | Staff Therapist, West Side Dance Physical Therapy, NY, NY |
| Risa Granick, PT, EdD | Special Lecturer & Associate Professor and Former Program Director, Columbia University Program in Physical Therapy |
| Alaina Hesse, PT, DPT | Neurosport Physical Therapy |
| Jennifer Jezequel, PT, DPT* | Physical Therapist  
Hospital for Special Surgery  
Board Certified Pediatric Clinical Specialist |
| Jonathan Jezequel, PT, DPT* | Staff Therapist, New York Sports Medicine, NY, NY  
Board Certified Orthopedic Clinical Specialist |
| Susan Klepper, PT, PhD | Special Lecturer & Assistant Professor of Rehabilitation & Regenerative Medicine |
| Peggy Lynam, PT, DPT | Associate Professor, Department of Physical Therapy  
Long Island University  
Board Certified Neurologic Clinical Specialist |
| Jamie Madden, PT, DPT | Board Certified Orthopedic Clinical Specialist  
Dynamic Care Physical Therapy |
David Malamut, PT, MA  
Clinical Specialist and Manager, Vestibular Rehabilitation Unit, RUSK, New York University Medical Center, NY, NY

Jeffrey Mannheimer, PT, PHD  
Partner, Delaware Valley Physical Therapy Associates, Lawrenceville, NJ  
Certified Cervical & Temporomandibular Therapist  
Certified in Orofascial Dry Needling

Susan Michlovitz, PT, PhD  
Ithaca, NY  
Board Certified Hand Therapist

Lori Quinn, PT, EdD  
Associate Professor, Movement Science & Kinesiology  
Teachers College, Columbia University

Melissa Ramirez, PT, DPT*  
Staff Therapist, Bronx VA Hospital, NY, NY  
Board Certified Neurologic Clinical Specialist

Richard Sabel, OTR, MA, MPH  
Educational Director East West Rehabilitation Institute  
Clinical Assistant Professor, Occupational Therapy Program, SUNY Downstate, Brooklyn, NY  
Guild Certified Feldenkrais Practitioner

Suzanne Semanson, PT, DPT  
Staff Therapist, NYU Hospital for Joint Diseases & Harkness Center for Dance Injuries, NY, NY  
Board Certified Orthopedic Clinical Specialist

Michael Shane, MA  
Private consultant, NY, NY in promoting Medical Spanish and Cultural Awareness for Health Professions

Rufino Singson, PT  
Manager of Rehabilitation Services, North Shore University Hospital, Manhasset, NY  
Board Certified Wound Care Specialist

Michael Turcinovic, PT  
Senior Therapist, Wound Care Services, North Shore University Hospital, Manhasset, NY

Richard Westrick, PT, DPT, DSc  
Associate Professor, Department of Physical Therapy  
School of Health & Rehabilitation Sciences  
Board Certified Orthopedic and Sports Clinical Specialist

Joli Melwani Wong, PT, DPT  
Director of Clinical Services, Physical Medicine & Rehabilitation  
NYC Health & Hospitals/Metropolitan

*Program Graduate
ADMINISTRATIVE AND SUPPORT STAFF

Vanessa Corwin, BA
Administrative Assistant, Communications & Marketing
vc2293@cumc.columbia.edu
212-305-7354

Gina Frassetto, MPA
Administrative & Business Manager
gf125@cumc.columbia.edu

Stephanie Henkin, BS
Administrative Coordinator, Clinical Education
sh3284@cumc.columbia.edu
212-305-7339

Susanna Mayas
Administrative Assistant
sem2254@cumc.columbia.edu
212-305-5267

Cynthia Worthington, MS
Administrative Coordinator, Admissions & Program Initiatives
cw75@cumc.columbia.edu
212-305-0470
ACCREDITATION
The DPT program at Columbia University, Vagelos College of Physicians and Surgeons, is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, Virginia 22314, telephone 703-706-3245, email accreditation@apta.org; or website. The Vagelos College of Physicians & Surgeons is accredited by the Liaison Committee on Medical Education (LCME). The program recently received reaffirmation of accreditation for the maximum 10-year period. Next onsite visit for accreditation is scheduled for 2024.

COLUMBIA UNIVERSITY IRVING MEDICAL CENTER (CUIMC)

The Program in Physical Therapy is part of the Vagelos College of Physicians and Surgeons. Founded in 1767, it is one of the world’s oldest medical schools. Situated on a 20-acre campus in Northern Manhattan, it extends from West 165th Street to West 173rd Street, and from Audubon Avenue to Riverside Drive. It includes the Columbia University campus of the New York Presbyterian Hospital and its subdivisions, the New York State Psychiatric Institute, the Vagelos College of Physicians and Surgeons, the School of Dental and Oral Surgery, the School of Nursing and the Mailman School of Public Health. The Irving Medical Center also has academic affiliations with Bassett Healthcare, in Cooperstown, NY; the Isabella Geriatric Center, in New York City; and Arnot Ogden Medical Center, in Elmira, NY. Columbia’s faculty practice is ColumbiaDoctors. Accounting for roughly half of Columbia University’s nearly $3 billion annual budget, Columbia University Irving Medical Center (CUIMC) provides global leadership in scientific research, health and medical education, and patient care.

The Irving Medical Center has been praised consistently for the quality, innovation and academic rigor of its educational programs and for the unsurpassed excellence and international prominence of its faculty. Graduate degrees offered by the Vagelos College of Physicians and Surgeons in addition to the DPT include MD, PhD, MD/PhD, MD/MBA, MD/MPH, MS and Doctor in Occupational Therapy and MS and Doctor of Nutrition. Learn more about the Vagelos College of Physicians and Surgeons’ educational programs.

CUIMC is especially proud of its relationship with the surrounding Washington Heights community, many of whose members have roots in the Dominican Republic and other Spanish-speaking countries. CUIMC’s Office of Government and Community Affairs serves as the primary liaison between the Irving Medical Center and the community. Currently, CUIMC has more than 40 active research and clinical programs in Northern Manhattan, including Harlem, Washington Heights, and Inwood.

Education does not end once the degree is earned. A CUIMC education fosters a commitment to life-long inquiry, as Columbia students learn to anticipate future health care needs and integrate their newfound knowledge and latest technology into patient care, research and public health.

HISTORY OF THE PROGRAM IN PHYSICAL THERAPY
Physical therapy education has had a long and illustrious history at Columbia University, graduating more than 3,000 students since its establishment in 1942. From 1942-1960 the program offered a Certificate of Proficiency in Physical Therapy at a time when few people knew about physical therapy, much less understood the potential of the profession. A pioneering faculty recognized the need to initially prepare physical therapists in rehabilitation of those injured during the time of war.

In 1960, the program evolved to offer the Bachelor of Science degree as well as continuing to offer the professional certificate. During these early years the program was housed on Columbia’s Morningside Campus; in 1946 it moved to the Irving Medical Center campus as part of the Faculty of Medicine.
In 1979, when the House of Delegates of the American Physical Therapy Association adopted a resolution calling for entry-level education at the post-baccalaureate level, Columbia University was one of the first programs to respond. The professional level Master of Science degree was established in 1980 making it the second oldest MS program in the United States. In 2003, changing trends in practice resulted in the creation of the present Doctor of Physical Therapy degree.

DOCTOR OF PHYSICAL THERAPY DEGREE PROGRAM

Additional information on the program and faculty, not contained within this Bulletin, can be obtained by going to the program’s web site.

Physical Therapy is a dynamic profession which incorporates a well-established theoretical base and widespread clinical application in the preservation, development and restoration of physical function. As essential practitioners in the health delivery system, physical therapists assume roles in rehabilitation services, prevention, health maintenance programs and professional and community programs. Physical therapists also advocate for the development of health policy and appropriate standards of care to assure patient/client availability, accessibility and excellence. Physical therapists supervise support personnel and serve as consultants to other health care personnel, families and caregivers, participate in the administration of services, conduct clinical research and often participate in academic teaching. As a science, physical therapy examines human motion at the tissue, organ and systems levels. It brings together theories of the basic and behavioral sciences, which help to explain normal and dysfunctional motor behavior. Physical therapy offers a unique synthesis of biological and behavioral theories and examines the interplay of physical and psychological factors on human motion.

The provision of physical therapy services includes clinical decision-making and evidence-based practice that underlie the individualized evaluation and treatment process to achieve desired goals and outcomes. The role of the physical therapist includes, but is not limited to patient/client:

- Problem identification
- Examination
- Evaluation
- Diagnosis
- Prognosis

Physical therapists enter the profession as generalist practitioners but often work with specialized patient populations such as orthopedic/sports, pediatric, adult neurological, cardiopulmonary and geriatric. Today, some physical therapists immediately upon receipt of licensure go into residency programs that allow entry-level clinicians to expand their expertise within defined areas of practice.

Depending on the setting and each patient’s/client’s needs, physical therapists work in consultation with physicians, dentists, nurses, occupational therapists, speech-language pathologists, psychologists, social workers, vocational counselors and teachers. Practice settings include; hospitals, rehabilitation centers, pediatric centers, school systems, hospices, nursing homes, private practice settings, high school, collegiate and professional sport teams and industry.

Today, 50 State Board Practice Acts and the District of Columbia, which guide the roles and responsibilities of a physical therapist, allow clinicians to practice under direct access that is the ability of patients to be evaluated and treated by a physical therapist without being referred by a doctor or other healthcare practitioner. With clinical experience, advanced academic and continuing education and specialty certification, physical therapists progress to specialist status, administrators, educators and researchers.
Based on the above, Columbia’s curriculum recognizes that physical therapy is a complex profession in which answers are context dependent. The philosophy of the curriculum is designed to develop competent clinicians who can embrace this complexity. Physical therapists practicing in today’s clinical arena need to exhibit multifaceted reasoning skills and be committed to lifelong learning in order to apply appropriate knowledge and skills in an ever-changing environment. To this end, the curriculum is based upon a dynamic framework that defines the profession of physical therapy and graduate education. The elements of this framework include: clinical reasoning, service expectations, societal obligations and principles related to professional education at the graduate level.

**MISSION AND PHILOSOPHY OF THE PROGRAM**

The Program’s mission is to provide a deep, broad, challenging education, beyond the acquisition of information and marketable skills, encouraging the desire for understanding and the quest for enduring values.

The mission of the Faculty of Medicine, Columbia University, in the 21st century is to provide a deep, broad, challenging education, beyond the acquisition of information and marketable skills, encouraging the desire for understanding and the quest for enduring values. Columbia’s Program in Physical Therapy adheres to this mission by offering diversity and breadth of educational opportunity to enable faculty, students and graduates to meet the needs of society in an ever-changing health care environment. Faculty is devoted to academic excellence, through imparting knowledge and directing research, which provides evidence in support of physical therapy practice. Students are guided to become compassionate, responsible practitioners who are critical thinkers and lifelong learners capable of integrating knowledge and skill with the art and ethics that a skilled physical therapy practitioner demonstrates.

As an integral part of the Vagelos College of Physicians and Surgeons, the physical therapy curriculum emphasizes the relationship of the health care provider and patient/client in the context of family, community and society. In addition to foundational and clinical sciences, the faculty focuses on critical exploration, practice issues and health care systems and management. The physical therapy curriculum provides a climate for learning that reduces memorization, enhances and rewards problem-solving, thus developing the skills for life-long learning. Students are prepared to promote and maintain development across the life span, promote and maintain health, foster adaptation, prevent dysfunction and promote wellness. The Program in Physical Therapy accomplishes these outcomes through implementation of learning principles that promote intellectual curiosity, critical thinking skills, an appreciation for evidence-based practice and the importance of research skills.

Upon completion of the program, graduates are eligible to sit for the national licensure examination under the auspices of the Federation of State Boards of Physical Therapy Educators. All states and the District of Columbia require licensure to practice. The exam is given at testing centers throughout the country 4 times a year; January, April, July and October. Columbia graduates may sit for the exam in April and July. Information related to the exam and fixed testing dates can be obtained from the Federation website.

It should be noted that a felony conviction may affect a graduate’s ability to sit for the examination and obtain state licensure. This is an individual decision made directly by the State Board in the state in which a graduate is seeking a license to practice. Any applicant to whom this restriction may apply is encouraged to check directly with the State Board prior to making application. A listing of all State Boards can be found on the Federation website, as above, under Licensing Authorities.
DOCTOR OF PHYSICAL THERAPY DEGREE

The purpose of Columbia’s DPT program is the preparation of competent physical therapists who, by virtue, of their graduate education, can enter the health care arena primarily as clinicians with beginning skills in research, administration and education.

Students come into the program with a strong foundation in the sciences as well as in the liberal arts. Columbia program builds on and refines this knowledge base and develops skills in the learner related to concept formation, analysis, synthesis, problem-solving and evidence-based practice. The program is built on a curriculum which grounds the students in the following domains of learning necessary for entry-level practice:

1. Scientific Foundations
2. Clinical Sciences
3. Critical Inquiry
4. Professional Practice
5. Health Care Systems and Management
6. Electives
7. Clinical Experiences

Upon graduation from the program, students will be able to affirm the following four broad performance outcomes that define a competent entry-level physical therapy clinician in today’s health care system.

1. Conceptual Competence: Understanding the theoretical foundations of the profession
2. Technical Competence: Ability to perform skills required by the profession
3. Integrative Competence: Ability to merge theory and skills in the practice setting
4. Career Marketability

ADMISSION REQUIREMENTS AND PROCEDURES TO FOLLOW

Full-time students are admitted to the program, which starts in the fall semester of each year. The program invites applications from individuals who have or will have received by the time of enrollment a baccalaureate degree granted by a college or university of recognized standing.

The minimum prerequisites for admission include the following undergraduate coursework.

Basic Sciences:
- **General biology** (8 credits) Two courses with laboratory. Applicants whose institution is on a quarter system must take a three-part course sequence or 3 distinct courses.
- **Anatomy & Physiology** (6-8 credits) Two separate and distinct courses or two semesters of combined Anatomy and Physiology I and II. Lab is not required but preferred.
- **Upper divisional biology** (3-4 credits) 300-400 level course designated for junior/senior standing. Kinesiology and exercise science majors only can use a course offered from their major to fulfill this prerequisite. Acceptable courses include exercise physiology or motor control, motor learning.
- **General Chemistry** (8 credits) Two courses with laboratory
- **General Physics** (8 credits) Two courses with laboratory

Behavioral Sciences:
- **Psychology** (6 credits) No preference as to psychology courses taken

Mathematics or statistics:
- **Note:** business or economics statistics courses do not fulfill this requirement
**Humanities & Social Sciences:** Five courses that have been taken to fulfill graduation requirements

**General Guidelines:** All of the prerequisite courses outlined above should be completed at the time of application. It is strongly recommended that all the biological science courses be completed by the December application deadline date.

- Courses should be no more than 10 years old
- Courses should be taken within the appropriate science department (e.g., General Biology in the biology department.
- On-line science courses must receive approval from the Program Director
- For science courses, a letter grade is preferable to pass/fail
- When two or more science courses are taken simultaneously in a university or college, grades must be B or better.

**Advanced placement credits** cannot be used to fulfill prerequisite course work. The courses do not need to be repeated but supplemental courses in lieu of the advanced placement credits need to be taken. For example, advanced placement credit for Biology I and II can be fulfilled by taking any two biology courses, such as Microbiology, Genetics, etc.

**Standardized Tests**

- **GRE:** General aptitude portion which includes verbal reasoning, quantitative reasoning and analytical writing
- **TOEFL:** Required for international students who have graduated from a college or university where English was not the language
- **CU English placement test:** Can be substituted for TOEFL
- **Columbia University code 7745; GRE code for PT 0619**

**Volunteer or work related experience:** Minimum 75 hours. A combination of practice environments is preferred, but they can be completed at one facility.

**Certification in Cardiopulmonary Resuscitation (CPR) and First Aid:** Copies of the certificates can be scanned and sent by email directly to the program to the attention of Cynthia Worthington, Admissions Coordinator, at cw75@cumc.columbia.edu. On-line courses are not accepted.

**Resume:** This may also be emailed to Mrs. Worthington.

**Interview:** Required if found to be competitive for admissions consideration

**INSTRUCTIONS FOR FILING AN APPLICATION**

Columbia University participates in the Physical Therapy Centralized Application Service (PTCAS) sponsored by the American Physical Therapy Association. Participation in this service helps simplify your application process. By using, a single web-based application and one set of supporting documentation, you can apply to multiple physical therapy programs. Please review all the information on the PTCAS website as well as the information in this Bulletin and on the Program’s website under Prospective Students to be sure that all admission criteria for Columbia have been met. If you encounter difficulty with the PTCAS, please do not contact the program. Inquiries should be made directly to Customer Service.

There are 2 ways to file an application.

**Early Acceptance:** Complete an application between July 1 and August 15, 2018. The program will advise PTCAS of its decision on your application by September 24. Early decision is binding. Candidates applying for early decision consideration must meet the following criteria:

1. Completion of all prerequisites for admission, as outlined, which must include all
course work in the biological sciences including the upper divisional biology requirement.

2. Completion of the minimum of 75 hours of volunteer or work-related experience in physical therapy.

3. Have undergraduate and science prerequisite grade point averages of 3.650 or higher.

4. Have minimum GRE scores of 160 (600) verbal, 148 (600) quantitative, 4.5 analytical writing.

5. Have 2 academic references and 1 physical therapy reference.

6. Have a resume.

7. Have an interview.

Regular Application Process: File your application by the program’s deadline date of December 3, 2018 through the Physical Therapist Centralized Application Service.

It is strongly recommended that applications be filed and completed prior to the deadline date.

Note: Under either application filing process, Canadian and international applicants can file directly with PTCAS. Canadian applicants need to forward an official transcript to the program in addition to filing with PTCAS. International applicants need to have their transcripts evaluated through the World Education Service and a copy of this evaluation needs to be sent directly to the program.

In determining the equivalency of a Canadian or international applicant's educational background in fulfilling the program's prerequisites for admission, the program is guided by the evaluation of educational credentials provided by the International Students and Scholars Office of Columbia University. The office can be reached at 212-854-3587, or by email at cumc-intl-students@columbia.edu.

Additional information on the admissions process can be found on the program’s website under “Frequently Asked Questions”. Enrollment per class, ethnicity information, admissions statistics, graduation rates, licensure pass rates and employment rates can be found on the website under “Who we are”.

STUDENT SELECTION

The primary requirement for admission into the DPT program is the applicant's ability, as judged by the program's Admissions Committee, to successfully complete the 3-year curriculum. Applicants who are admitted into the program have strong academic records as evidenced by their cumulative and science grade point averages, their breadth and depth of science background and their demonstrated consistency of undergraduate academic performance. A firm and clear commitment to physical therapy is another criterion for admission as manifested by work or volunteer experience. Qualities such as maturity and effective interpersonal relationships and leadership, as ascertained from the letters of recommendation and the personal interview are important admissions criteria.

An applicant who receives a provisional acceptance on the basis of course work still in progress must satisfactorily complete all outstanding courses prior to matriculation. All students must submit a final transcript that indicates the receipt of the baccalaureate degree.

The Program in Physical Therapy reserves the right to rescind an acceptance offer if the above are not completed by the start of program classes.

Columbia University is a private university. No preference is given to in-state versus out-of-state
residents. Every applicant is considered individually with regard to suitability for graduate study and expectation of scholarly attainment.

**INTERVIEWS**

All applicants who meet the minimal prerequisites will be considered on an individual basis. Applicants found to be competitive are invited for a day-long interview. The interview process serves a dual purpose:

1. It provides a realistic evaluation of eligibility for admission into the program as it assesses personality, clarity of thought, strength of academic background, quality of related clinical and/or work experience, and knowledge of the profession.

2. It gives the applicant an opportunity to learn more about the program's teaching and learning philosophy and to spend time with faculty and enrolled students to appraise the program in terms of meeting personal and professional growth.

During the regular admission process, the program uses a rolling admissions format and applicants can be notified of their acceptance status within two weeks post-interview. Interviews begin in October/November and close once a full class is accepted, typically by January/February.

**ACCEPTANCE**

Applicants accepted into the program must notify the program of their intent by the date indicated on the acceptance letter by completing an Acceptance Acknowledgement Form and submitting a non-refundable $1000 acceptance deposit. The deposit is applied to tuition upon registration only in the class to which the applicant has been accepted.

A criminal background check is not required upon acceptance but may be required by a clinical affiliation site. See below.

**HEALTH EXAMINATION, DRUG TESTING, CRIMINAL BACKGROUND CHECK AND LIABILITY**

To comply with federal and state regulations, Columbia University requires all students on the Medical Center Campus enrolled in a clinical program to meet specific health requirements. A Pre-Registration Brochure and required forms can be found on the Student Health Services website. The requisite health information must be provided in order to register.

All students on the Irving Medical Center Campus are required to have a drug test prior to the start of any clinical education experience. For students enrolled in the DPT program, the drug test administered by Student Health will occur in the latter part of the first year of study prior to the first clinical education experience (Clinical Education I). Visit the Student Health Services website for a complete description of the Pre-Clinical Drug Testing policy and procedures.

Repeated drug testing may be required by certain clinical education sites as students move through Clinical Education II and the Clinical Internship. These latter drug tests will be performed by Student Health Services but at a fee to the student.

Clinical placement sites may require a criminal background check. Students are required to complete this check process independently, with its associated cost, and submit results directly to the clinical site.

Professional liability insurance is provided by the program, which covers all students during the clinical education portion of the curriculum.
DEGREE REQUIREMENTS

1. The curriculum is sequential and courses are only taught once in any given academic semester. Hence, continuous registration is required within the full-time, 3-year prescribed length of study. A leave of absence may be granted for a compelling reason such as sustained ill health or military service and must be taken for one year.

2. Satisfactory achievement must be earned in all courses by maintaining a minimum grade point average of 3.000. All clinical education experiences must be successfully completed with a pass grade. Please refer to the academic standards section of this Bulletin.

3. Continual development of appropriate professional behaviors as required for advancement throughout the program.

4. Maintaining valid CPR and First Aid certification.

5. Meeting and maintaining all medical and legal requirements of the University and those of the clinical affiliation sites are the responsibility of the student. Failure to meet or comply with these requirements may result in delay or termination of academic and/or clinical progression.

6. Maintain valid APTA membership.

The program’s Academic Standards Committee must be assured that students have acquired the essential knowledge and skills necessary for entry-level practice as competent clinicians. The Committee reserves the right to withdraw, deny readmission or graduation to any student who in the judgment of the Committee is determined to be unsuited for the study or practice of physical therapy.

PROGRAM OF STUDY

The DPT program encompasses 3 years of full-time study. There are 10 academic and clinical sessions occurring over 31 consecutive months. Clinical education is 8, 10 and 18 (or 9 x 2) weeks respectively (Clinical Education I, II and the Terminal Clinical Experience). Students are in class 5 days per week to allow for assimilation and application of new knowledge as well as provide the time for self-directed learning activities. Following Columbia’s medical curriculum model, courses were designed to reflect hours of instruction rather than point credits to afford a more independent learning environment that facilitates the attainment of knowledge and skills. Contact hours per week for the semesters in which clinical education occurs are a minimum of 35 and a maximum of 45 hours per week and mirror the clinical workweek of the assigned affiliation site.

The DPT program prepares graduates for entry into physical therapy in the domains of clinical practice, research, education, consultation and administration. The curriculum includes academic preparation and clinical experiences in health care facilities nation-wide and abroad. Academic instruction is comprised of didactic courses in basic and clinical sciences, patient management, evidence-based practice, professional issues, administration and education. Areas of concentration within physical therapy are explored in the advanced topic courses, electives and the terminal clinical experience. Learning is viewed as a dynamic and interactive process requiring active student participation in a variety of educational experiences. The program facilitates the development of appropriate professional behaviors and students are expected to internalize and demonstrate professional values and ethical behavior.

Clinical experiences, including integrated clinical experiences (ICE) tied to a variety of didactic courses, are interspersed throughout the curriculum to facilitate integration of academic information with clinical practice. Full-time clinical experiences begin in the second half of Fall II, continue in Summer II and
culminate with the terminal clinical experience in Spring III. All affiliations are full-time in health care institutions throughout the country and abroad, comprising a total of 36 weeks of practice.

A Scholarly Project, the investigational component of the DPT, is required of all students for graduation. This project enables the student to learn how to develop and implement inquiry into a narrowly defined topic of relevance to physical therapy. The project is intended to serve as a vehicle to integrate new information with that existing in the field. The Clinical Case Management Seminar culminates with a reflective case study that integrates consideration of all systems with hands-on clinical experience, review of evidence-based literature and clinical consultation. For students wanting a more intensive research experience, the Research Practicum is offered by applying for and being selected to work with a faculty member on an ongoing research project.

The program reserves the right to withdraw or modify the courses listed below, change the curriculum sequence or change instructors as may be necessary.

All program DPT courses are designated 800 and 900 level courses. Each course number consists of capital letters, which for the DPT program is designated PHYT, followed by the letter M indicating its offering under the Vagelos College of Physicians and Surgeons. The 4-digit number designates the subject area of the course.

8000 Clinical Education Seminars
8100 Scientific Foundations
8200 Professional Leadership & Practice
8300 Clinical Sciences (Procedures, Modalities, Exercise)
8500 Health Care Systems and Management
8600 Clinical Sciences (PT Management Discipline Specific)
8700 Critical Exploration (Evidence-Based Practice)
8800 General Electives, Specialized Electives, Research and Teaching Practicums
8900 Clinical Education I & II
9000 Clinical Sciences (Advanced Topics)
9200 Clinical Internship
1-8 Indicates semester 1, 2, 3, 4, 5, 6, 7, 8
x, y, z Indicates, under the course description, whether the course meets in the fall (x), spring (y), z (summer)

The number of points listed for each course reflects lecture, laboratory, seminar, out-of-class assignments and research hours associated with the course and is used for the purpose of computing a cumulative grade point average (GPA). In-class hours are listed followed by estimated out-of-class-hours required to meet course objectives. The ranges for out-of-class hours have been compiled from course evaluations and are based on responses equaling 50% or more from any given class. The faculty believes that both in-class and out-of-class hours give the students a more realistic expectation of the amount of time required, during any given semester, to develop the study and time management skills to successfully pass each course.

Clinical Education I and II and the terminal clinical experience are graded Pass/Fail. No points are given for these experiences as students adhere to the work schedule of their clinical instructors at the facilities to which they have been assigned. Clinical education hours and expectations tend to vary; hence, it is difficult to assign equity points. However, successful completion of the clinical education portion of the curriculum is a requirement for awarding the DPT degree.

No points are given for the elective offerings following a continuing education format. Attendance is mandatory to receive a “Pass” grade. The electives taken for credit have a grading and attendance component, which varies depending on the nature of the course. Both types of electives provide the opportunity to study with experienced (master) clinicians.
Research and Teaching Practicums are pass/fail courses, based on meeting outcomes through the development of “contracts” between the faculty mentor and student.

THE CURRICULUM

VIEW THE ACCESSIBLE VERSION OF THIS TABLE

<table>
<thead>
<tr>
<th>YEAR I</th>
<th>Credit Hours</th>
<th>In-Class Hours/Week</th>
<th>Out-of-Class Hours/Week</th>
<th>Primary Course Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester (16 weeks including final exams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYT M8100 Gross Anatomy</td>
<td>7</td>
<td>10</td>
<td>5 - 12</td>
<td>Drs. Stacy Kinirons &amp; Robert Evander</td>
</tr>
<tr>
<td>PHYT M8115 Applied Physiology</td>
<td>2</td>
<td>2</td>
<td>1 - 6</td>
<td>Dr. Colleen Brough</td>
</tr>
<tr>
<td>PHYT M8125 Kinesiology &amp; Biomechanics I</td>
<td>5</td>
<td>7</td>
<td>3 - 9</td>
<td>Drs. Cynthia Chiarello &amp; Wing Fu</td>
</tr>
<tr>
<td>PHYT M8211 Professional Leadership &amp; Practice I</td>
<td>2</td>
<td>2</td>
<td>1 – 2</td>
<td>Dr. Laurel Daniels Abbruzzese</td>
</tr>
<tr>
<td>PHYT M8301 Examination &amp; Evaluation</td>
<td>3</td>
<td>4</td>
<td>2 - 4</td>
<td>Dr. Martha Sliwinski</td>
</tr>
<tr>
<td>PHYT M8704 Evidence-Based Practice I</td>
<td>2</td>
<td>2</td>
<td>1 - 6</td>
<td>Dr. Ashwini Rao</td>
</tr>
<tr>
<td>Totals -required</td>
<td>21</td>
<td>27</td>
<td>13 – 39</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPRING I</th>
<th>Credit Hours</th>
<th>In-Class Hours/Week</th>
<th>Out-of-Class Hours/Week</th>
<th>Primary Course Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring I (18 weeks including spring recess &amp; final exams)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYT M8003 Clinical Education Seminar I</td>
<td>0</td>
<td>Variable*</td>
<td>Variable*</td>
<td>Drs. Mahlon Stewart &amp; Colleen Brough</td>
</tr>
<tr>
<td>PHYT M8105 Neuroscience</td>
<td>4</td>
<td>4</td>
<td>5 - 12</td>
<td>Drs. Stacy Kinirons &amp; Ashwini Rao</td>
</tr>
<tr>
<td>PHYT M8112 Medical Screening I</td>
<td>2</td>
<td>2</td>
<td>1 – 2</td>
<td>Dr. Michael Johnson</td>
</tr>
<tr>
<td>PHYT M8126 Kinesiology &amp; Biomechanics II</td>
<td>3</td>
<td>3 - 4</td>
<td>3 - 7</td>
<td>Dr. Laurel Daniels Abbruzzese</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hours</td>
<td>In-Class Hours/Week</td>
<td>Out-of-Class Hours/Week</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>---------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>PHYT M8130</td>
<td>Movement Science</td>
<td>2</td>
<td>2</td>
<td>3 - 9</td>
</tr>
<tr>
<td>PHYT M8303</td>
<td>PT Procedures</td>
<td>3</td>
<td>4</td>
<td>1 - 6</td>
</tr>
<tr>
<td>PHYT M8308</td>
<td>1st half of semester Concepts in Therapeutic</td>
<td>2</td>
<td>5</td>
<td>3 – 9</td>
</tr>
<tr>
<td></td>
<td>Exercise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYT M8610</td>
<td>2nd half : PT Mgt. of Orthopedic Conditions I</td>
<td>2</td>
<td>6</td>
<td>3 - 9</td>
</tr>
<tr>
<td>PHYT M8212</td>
<td>Professional Leadership and Practice II</td>
<td>2</td>
<td>2</td>
<td>1 - 3</td>
</tr>
<tr>
<td>PHYT M8705</td>
<td>Evidence-Based Practice II</td>
<td>2</td>
<td>2</td>
<td>1 - 6</td>
</tr>
<tr>
<td></td>
<td>Integrated Clinical Experiences (ICE)</td>
<td>(0)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M8849</td>
<td>Service Learning Elective</td>
<td>(2)</td>
<td>(0)</td>
<td>1 week in Guatemala</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>during Spring Recess</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dr. Martha Sliwinski</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>22 (24)</strong></td>
<td><strong>30 - 31</strong></td>
<td><strong>21 - 63</strong></td>
</tr>
<tr>
<td></td>
<td><strong>required</strong></td>
<td></td>
<td></td>
<td><strong>(Elective)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Seminar does not meet on a weekly basis.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Summer I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>In-Class Hours/Week</th>
<th>Out-of-Class Hours/Week</th>
<th>Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYT M8310</td>
<td>Physical Modalities</td>
<td>1</td>
<td>4-5x4</td>
<td>2-4</td>
<td>Dr. Wing Fu</td>
</tr>
<tr>
<td>PHYT M8315</td>
<td>Soft Tissue Mobilization</td>
<td>2</td>
<td>5</td>
<td>2-4</td>
<td>Dr. Kevin Wong</td>
</tr>
<tr>
<td>PHYT M8611</td>
<td>PT Mgmt of Ortho Cond II</td>
<td>4</td>
<td>9</td>
<td>3-9</td>
<td>Dr. Jean Timmerberg</td>
</tr>
<tr>
<td>PHYT M8634</td>
<td>Clinical Geriatrics</td>
<td>3</td>
<td>6</td>
<td>3-6</td>
<td>Dr. Laurel Daniels Abbruzzese</td>
</tr>
<tr>
<td>PHYT M8800</td>
<td>Medical Spanish</td>
<td>0</td>
<td>12.5</td>
<td>0</td>
<td>Mr. Michael Shane (adjunct faculty)</td>
</tr>
<tr>
<td>PHYT M9701</td>
<td>Medical Screening II</td>
<td>2</td>
<td>2</td>
<td>1-6</td>
<td>Dr. Michael Johnson</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>12</strong></td>
<td><strong>26-27</strong></td>
<td><strong>10-31</strong></td>
<td></td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>CREDIT HOURS</td>
<td>IN-CLASS HOURS/WE ek</td>
<td>OUT-OF-CLASS HOURS/WE ek</td>
<td>PRIMARY COURSE INSTRUCTOR(S)</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>PHYT M8004</td>
<td>Clinical Education Seminar II</td>
<td>0</td>
<td>Variable*</td>
<td>Variable*</td>
<td>Drs. Mahlon Stewart &amp; Colleen Brough</td>
</tr>
<tr>
<td>PHYT M8601</td>
<td>PT Mgt. of Cardiopulmonary Conditions</td>
<td>3</td>
<td>6</td>
<td>3 - 9</td>
<td>Professor Kim Stavrolakes &amp; Affiliates of NYPH</td>
</tr>
<tr>
<td>PHYT M8612</td>
<td>PT Mgt. of Orthopedic Conditions III</td>
<td>4</td>
<td>9</td>
<td>5 - 12</td>
<td>Dr. Jean Timmerberg</td>
</tr>
<tr>
<td>PHYT M8620</td>
<td>PT Mgt. of the Adult with Neurological Conditions I</td>
<td>3</td>
<td>6</td>
<td>3 – 9</td>
<td>Drs. Clare Bassile &amp; Martha Sliwinski</td>
</tr>
<tr>
<td>PHYT M8636</td>
<td>Orthotics</td>
<td>2</td>
<td>4</td>
<td>4 - 7</td>
<td>Dr. Christopher Kevin Wong</td>
</tr>
<tr>
<td>PHYT M8853</td>
<td>Research Practicum I Elective</td>
<td>(1)</td>
<td>(0)</td>
<td>(Variable)</td>
<td>Dr. Jacqueline Montes &amp; Faculty</td>
</tr>
</tbody>
</table>

**Totals**

<table>
<thead>
<tr>
<th></th>
<th>CREDIT HOURS</th>
<th>IN-CLASS HOURS/ WEEK</th>
<th>OUT-OF-CLASS HOURS/ WEEK</th>
<th>PRIMARY COURSE INSTRUCTOR(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>12 (13)</strong></td>
<td><strong>25</strong></td>
<td><strong>15 –37 + (Elective)</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Seminar does not meet on a weekly basis

---

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CREDIT HOURS</th>
<th>IN-CLASS HOURS/ WEEK</th>
<th>OUT-OF-CLASS HOURS/ WEEK</th>
<th>PRIMARY COURSE INSTRUCTOR(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYT M8901</td>
<td>Clinical Education I</td>
<td>0</td>
<td>0</td>
<td>35 – 45*</td>
<td>Drs. Colleen Brough &amp; Mahlon Stewart</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hrs 1</td>
<td>Hrs 2</td>
<td>Hours/Week</td>
<td>Instructor(s)</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>PHYT M8005</td>
<td>Clinical Education Seminar III</td>
<td>0</td>
<td>Variable</td>
<td>Variable</td>
<td>Drs. Mahlon Stewart &amp; Colleen Brough</td>
</tr>
<tr>
<td>PHYT M8560</td>
<td>Professional Leadership &amp; Practice III</td>
<td>2</td>
<td>2</td>
<td>1 - 6</td>
<td>Dr. Debra Krasinski</td>
</tr>
<tr>
<td>PHYT M8311</td>
<td>PT Mgt. of Integumentary Impairments (1st half of semester)</td>
<td>2</td>
<td>4</td>
<td>1 - 6</td>
<td>Richie Singson (Adjunct Faculty)</td>
</tr>
<tr>
<td>PHYT M8613</td>
<td>PT Mgt. of Orthopedic Conditions IV</td>
<td>5</td>
<td>7</td>
<td>5 – 9</td>
<td>Dr. Cynthia Chiarello</td>
</tr>
<tr>
<td>PHYT M8621</td>
<td>PT Mgt. of the Adult with Neurological Conditions II: Spinal Cord Injures &amp; Complex Neuro Patients</td>
<td>5</td>
<td>6</td>
<td>5 - 12</td>
<td>Drs. Martha Sliwinski &amp; Clare Bassile</td>
</tr>
<tr>
<td>PHYT M8630</td>
<td>PT Mgt. of Pediatric Conditions</td>
<td>5</td>
<td>6</td>
<td>5 - 12</td>
<td>Drs. Lisa Yoon &amp; Margaret O’Neil</td>
</tr>
<tr>
<td>PHYT M8637</td>
<td>Prosthetics (2nd half of semester)</td>
<td>2</td>
<td>5</td>
<td>1 - 4</td>
<td>Dr. Christopher Kevin Wong</td>
</tr>
<tr>
<td>PHYT M8854</td>
<td>Research Practicum II Elective</td>
<td>(1)</td>
<td>(0)</td>
<td>Variable*</td>
<td>Dr. Jacqueline Montes &amp; Faculty</td>
</tr>
<tr>
<td>PHYT M 8849</td>
<td>Service Learning Elective</td>
<td>(2)</td>
<td>(0)</td>
<td></td>
<td>Drs. Sliwinski &amp; Yoon: 1 week in Guatemala either as a returning student or first-time experience during Spring or Summer II Recess</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td><strong>21</strong></td>
<td><strong>(24)</strong></td>
<td><strong>30</strong>*</td>
<td><strong>18 – 49 + (Elective)</strong></td>
</tr>
</tbody>
</table>

*Does not meet on a weekly basis.
<table>
<thead>
<tr>
<th><strong>Summer II</strong></th>
<th>Credit Hrs</th>
<th>In-Class Hours/Week</th>
<th>Out-of-Class Hours/Week</th>
<th>Primary Course Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10 weeks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYT M 8902</td>
<td>0</td>
<td>0</td>
<td>35 – 45*</td>
<td>Drs. Colleen Brough &amp; Mahlon Stewart, Directors of Clinical Education</td>
</tr>
<tr>
<td>Clinical Education II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>0</td>
<td>0</td>
<td>350 – 450* + (Elective)</td>
<td>*Hours are determined by the clinical affiliation site</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>In-Class Hrs</td>
<td>Out-of-Class Hrs/Week</td>
<td>Primary Course Instructor(s)</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>--------------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PHYT M8007</td>
<td>Clinical Education Seminar IV</td>
<td>0</td>
<td>Variable*</td>
<td>Drs. Mahlon Stewart &amp; Colleen Brough.</td>
</tr>
<tr>
<td>PHYT M8217</td>
<td>Professional Leadership &amp; Practice IV</td>
<td>5</td>
<td>Variable*</td>
<td>Drs. Laurel Abbruzzese &amp; Debra Krasinski, Martha Sliwinski, Michael Johnson, Lila Abbate, Mary Jean Taylor</td>
</tr>
<tr>
<td>PHYT M9040</td>
<td>Clinical Case Management Seminar</td>
<td>2</td>
<td>Variable*</td>
<td>Dr. Wing Fu &amp; Prof. Kim Stavrolakes</td>
</tr>
<tr>
<td>PHYT M9072</td>
<td>Medical Screening III</td>
<td>2</td>
<td>2 - 3</td>
<td>Drs. Michael Johnson &amp; William Boissonnault (adjunct faculty)</td>
</tr>
<tr>
<td>PHYT M9041</td>
<td>Complex Medical Conditions</td>
<td>2</td>
<td>Variable*</td>
<td>Dr. Wing Fu</td>
</tr>
<tr>
<td><strong>Concentration Track (select 1)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYT M9015</td>
<td>Advanced Seminar in Orthopedics</td>
<td>4</td>
<td>Variable*</td>
<td>Drs. Christopher Kevin Wong &amp; Evan Johnson</td>
</tr>
<tr>
<td>PHYT M9025</td>
<td>Advanced Seminar in Adult Neuro-rehabilitation</td>
<td></td>
<td>4 - 6</td>
<td>Dr. Clare Bassile</td>
</tr>
<tr>
<td>PHYT M9035</td>
<td>Advanced Seminar in Pediatrics</td>
<td></td>
<td>5 - 12</td>
<td>Drs. Lisa Yoon &amp; Margaret O’Neill</td>
</tr>
<tr>
<td><strong>Totals (Required Coursework)</strong></td>
<td></td>
<td>14</td>
<td>Variable</td>
<td>12 + Variable</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
<td>Hours/Weeks</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>PHYT M8801</td>
<td>Elder Interdisciplinary Program</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M8802</td>
<td>Spinal Cord Injury</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M8804</td>
<td>Integrative Therapies</td>
<td>(1)</td>
<td>8 x 2 sessions</td>
<td>1-2</td>
</tr>
<tr>
<td>PHYT M8812</td>
<td>Vestibular Rehabilitation (required for students in the Adult Neurorhabilitation &amp; Pediatric topic courses)</td>
<td>(1)</td>
<td>Variable*</td>
<td>6 - 12</td>
</tr>
<tr>
<td>PHYT M8815</td>
<td>Women's Health Issues</td>
<td>(1)</td>
<td>4 x 7 wks</td>
<td>1 - 6</td>
</tr>
<tr>
<td>PHYT M8825</td>
<td>Sports Rehabilitation</td>
<td>(1)</td>
<td>Variable*</td>
<td>1 - 4</td>
</tr>
<tr>
<td>PHYT M8830</td>
<td>Hand Rehabilitation</td>
<td>(1)</td>
<td>Variable*</td>
<td>1 - 4</td>
</tr>
<tr>
<td>PHYT M8832</td>
<td>Foot &amp; Ankle Rehabilitation</td>
<td>(1)</td>
<td>Variable*</td>
<td>3 - 6</td>
</tr>
<tr>
<td>PHYT M8833</td>
<td>Craniofacial Pain of Cervicogenic Origin: Headaches &amp; Temporomandibular Disorders</td>
<td>(1)</td>
<td>4 x 10 wks</td>
<td>1-4</td>
</tr>
<tr>
<td>PHYT M8835</td>
<td>Performing Arts PT</td>
<td>(1)</td>
<td>Variable*</td>
<td>3 - 6</td>
</tr>
<tr>
<td>PHYT M8845</td>
<td>Teaching Practicum: Lecture</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M8846</td>
<td>Teaching Practicum: Laboratory</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M8847</td>
<td>Teaching Practicum: Small Groups</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M8855</td>
<td>Research Practicum III</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credit Hrs</td>
<td>In-Class Hours/Week</td>
<td>Out-of-Class Hours/Week</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>------------</td>
<td>---------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>PHYT M8857</td>
<td>Management of the Running Athlete</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable*</td>
</tr>
<tr>
<td>PHYT M9005</td>
<td>Topics in Cardiopulmonary</td>
<td>(1)</td>
<td>Variable*</td>
<td>Variable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer III (18 weeks)</th>
<th>Credit Hrs</th>
<th>In-Class Hours/Week</th>
<th>Out-of-Class Hours/Week</th>
<th>Primary Course Instructor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYT M 9200</td>
<td>0</td>
<td>0</td>
<td>35 – 45*</td>
<td>Drs. Colleen Brough &amp; Mahlon Stewart</td>
</tr>
<tr>
<td>Terminal Clinical Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>0</td>
<td>0</td>
<td>630 – 810* + (Elective)</td>
<td></td>
</tr>
</tbody>
</table>

*Hours are determined by the clinical affiliation site

Note: Faculty reserve the right to revise the curriculum as deemed necessary
COURSE DESCRIPTIONS-SCIENTIFIC FOUNDATIONS

PHYT M8100 Gross Anatomy 1x
Drs. Stacy Kinirons & Robert Evander
The course provides a detailed coverage of human anatomy through lecture and cadaver dissection. The course uses a regional approach to study the gross anatomical structures of the human body, with emphasis on the musculoskeletal system and its associated vascular and neural elements. The structure of synovial joints and their soft tissue support systems will be addressed. The thoracic, abdominal, and pelvic cavities will be explored. Aspects of structure and function as they relate to clinical correlates will be highlighted throughout the course.

PHYT M8105 Neuroscience 2y
Drs. Stacy Kinirons & Ashwini Rao
The course provides a detailed coverage of neuroscience through lecture and one human cadaver prosection lab. The course uses a primarily systems approach to study neuroscience. The focus of the course is on the integral relationship between structure and function, as it relates to the neural basis for perception, movement, behavior, and cognition. A comprehensive understanding of normal structure and function provides the foundation for understanding abnormal structure and function. Functional consequences of lesions to various parts of the nervous system will be discussed.

PHYT M8115 Applied Physiology 1x
Dr. Colleen Brough
The course provides a theoretical basis for understanding the body's physiological responses to exercise. Emphasis will be placed upon the practical application of exercise physiology principles in physical therapy practice. Acute and chronic adaptations to exercise are covered related to the cardiovascular, respiratory, neuromuscular and metabolic systems. The course provides an integrative view of human exercise physiology and will cover acute and chronic adaptations to exercise including the cardiovascular, respiratory, neuromuscular and metabolic systems in relation to acute and chronic exercise.

PHYT M8125 Kinesiology & Biomechanics I 1x
Drs. Cynthia Chiarello & Wing Fu
This is the first of a two-part series that establishes foundational knowledge of normal human movement. The course begins with an introduction to the mechanical properties of connective tissue and muscle mechanics. Essential principles of biomechanics including gravity, friction, leverage, composition and resolution of internal and external forces in movement production are presented. These topics are integrated into structural kinesiology organized by anatomical region. Specific attention will be given to the relationship between anatomical structure and kinesiological function, joint classification, osteokinematics, arthrokineamatics, muscle and ligament function, kinematic chains and posture. There is an emphasis on kinematics and muscle function in normal functional movements. Pathological movement is introduced. The laboratory component highlights surface anatomy palpation with emphasis on structure identification, positioning, body mechanics and hand placement. Optional seminar classes are small group integrative discussion sessions in which students who wish to attend come prepared with questions. Both lecture and laboratory incorporate observation and analysis of normal movement of the limbs and trunk, and selected examples.

PHYT M8126 Kinesiology & Biomechanics II 2y
Dr. Laurel Daniels Abbruzzese
This is the second in a two-part series of Kinesiology and Biomechanics courses in which the study of normal human motion is continued in greater depth with an emphasis on solving clinical biomechanics problems and introductory gait analysis. Although this course is part of the foundational sciences, students will begin to integrate this material with clinical case scenarios. The course serves as a foundation for continued gait analysis activities in courses such as Movement Science, Orthotics, Prosthetics, Orthopedics, Pediatrics, Geriatrics and Adult Neurorehabilitation. Lectures are combined with team-based learning activities and out of class assignments in order to promote collaboration, higher-
order thinking skills and affective behaviors required in the clinic. In the first half of the course students learn to graphically represent the forces that act on the body in different positions. In the second half of the course students are introduced to the terminology used to describe the phases of the gait cycle, temporal-spatial parameters used in gait analysis, and common gait deviations and apply this knowledge in the analysis of several gait videos and in a gait lab. A brief overview of running gait will be covered.

PHYT M8130 Movement Science,
Dr. Clare Bassile
This course emphasizes the conceptual framework of movement science, including normal motor control, and skill acquisition. Principles of motor control, including neurophysiological, biomechanical and behavioral levels of analysis are discussed. An analysis of postural control, locomotion and reach and grasp will be conducted. Principles of motor learning, including learning and practice variables are analyzed.

COURSE DESCRIPTIONS—CLINICAL SCIENCES
(Most courses have a lecture/laboratory component)

PHYT M8301 Examination & Evaluation,
Dr. Martha Sliwinski
This course, an introduction to the patient management model with emphasis on examination, is presented in a lecture-lab format. The examination process is detailed including systems review and tests and measures of peripheral nerve integrity, flexibility, motor function, muscle performance, posture, and range of motion. Emphasis is placed on manual muscle testing and goniometry. Students are introduced to clinical decision-making.

PHYT M8303 PT Procedures,
Dr. Mahlon Stewart
This course focuses on developing the basic knowledge and skills required to deliver physical therapy services in the earliest stages of recovery, from critical care to inpatient rehabilitation. Students will learn to combine data from multiple sources to produce a diagnosis and prognosis, and develop an individualized plan of care. Students learn basic patient handling skills they will use throughout the DPT curriculum, and they practice and demonstrate the proper selection and use of common assistive devices. There is a concurrent focus on physical therapy documentation and the use of functional goal writing to support clinical decisions and justify skilled care. Clinical decision-making is developed through role-playing, case study and review of scientific literature. Emphasis is placed on the physical therapist acting as part of an interdisciplinary team of providers and the important role of patient-centered care.

PHYT M8308 Concepts in Therapeutic Exercise,
Dr. Jean Fitzpatrick Timmerberg, adjunct faculty Dr. Rami Said
This course immediately follows Examination and Evaluation, Kinesiology I, Anatomy and Applied Physiology, and is constructed to introduce basic movement patterns, the common dysfunctions associated with these patterns, and an introduction to patient/client therapeutic exercise design, implementation and re-evaluation concepts. The course introduces the student to the underlying frameworks and constructs for normal and dysfunctional movement assessments and the development of individualized exercise programs as part of the patient management model. Students will apply clinical decision-making strategies to practice, design, modify and progress exercise programs with proper biomechanical alignment and proper muscle balance. Video/case studies presenting with a variety of impairments will be used to develop clinical decision-making and therapeutic exercise design. Patient-practitioner interaction as well as patient instruction will be integrated throughout the course.
PHYT M8310 Physical Modalities
Dr. Wing Fu
The content of this course focuses on effective, efficacious and safe application of physical modalities in physical therapy practice. It is designed to provide students with a theoretical knowledge base and the psychomotor skills required for the therapeutic application of commonly used physical modalities in a safe and appropriate manner. Clinical reasoning will be fostered through lectures, group discussions, hands-on laboratory activities, and case studies. Students will be expected to apply information from previous coursework in a relevant manner to critically analyze a variety of clinical scenarios.

PHYT M8601 Physical Therapy Management of Cardiopulmonary Conditions I
Adjunct Faculty Kim Stavrolakes
This course provides extended exposure to normal physiology and pathophysiology of the cardiovascular system. Exploration of pathophysiological changes of the cardiovascular system and of evaluative techniques for identifying these changes will provide the student with knowledge critical to decision making in contemporary clinical practice. The course will cover examination, evaluation, diagnosis, prognosis, intervention, and outcomes for patients with various cardiopulmonary disorders.

PHYT M8610 PT Management of Orthopedic Conditions I: The Hip
Dr. Jean Timmerberg
This course is the first in a series of four courses on orthopedic physical therapy. It emphasizes differential diagnosis, clinical decision-making and development and implementation of a plan of care for patients demonstrating musculoskeletal dysfunction of the hip. Examination, evaluation, diagnosis, prognosis, intervention and outcome assessment for the hip is linked with diagnostic imaging and conservative and surgical management. Interventions integrate joint and soft tissue manual therapy techniques with therapeutic exercise. Exercise applications that are utilized throughout the lifespan that address identified impairments, activity and participation limitations are emphasized. This course will be given in a flipped-hybrid learning format consisting of face to face classroom time, online video lectures as well as face to face classroom time for higher level activities and problem solving and to apply what has been learned outside the classroom.

PHYT M8611 Management of Orthopedic Conditions II: Knee and Ankle
Dr. Jean Timmerberg
This is the second in a series of four courses on orthopedic physical therapy. This course emphasizes differential diagnosis, clinical decision-making, and development and implementation of a plan of care for patients demonstrating musculoskeletal dysfunction of the knee and ankle. Examination, evaluation, diagnosis, prognosis, intervention and outcome assessment for the knee and ankle are linked with diagnostic imaging and conservative and surgical management. Interventions integrate joint and soft tissue manual therapy techniques with therapeutic exercise. Exercise applications that are utilized throughout the lifespan that address identified impairments, activity and participation limitations are emphasized. This course will be given in a flipped-hybrid learning format consisting of face to face classroom time, online video lectures as well as face to face classroom time for higher level activities and problem solving and to apply what has been learned outside the classroom.

PHYT M8612 Management of Orthopedic Conditions III: Upper Extremities
Dr. Jean Timmerberg
This is the third in a series of four courses on orthopedic physical therapy. The course emphasizes differential diagnosis, clinical decision-making, and development and implementation of a plan of care for patients, demonstrating musculoskeletal dysfunction of the upper extremities. This course applies the patient management model to musculoskeletal conditions associated with the upper extremities. Examination, intervention, progression and outcome assessment of the upper extremity is linked with diagnostic imaging and conservative surgical management. Interventions integrate joint and soft tissue manual therapy techniques with therapeutic exercise. Emphasis is placed on clinical decision-making and evidence-based practice in individuals with orthopedic conditions.
PHYT M8613 PT Management of Orthopedics IV-Spine
Dr. Cynthia Chiarello
This is the final course in the orthopedic series offering an integrated approach to the theoretical and practical basis of clinical practice for musculoskeletal conditions of the spine. Critical thinking and problem solving are highlighted. Cutting edge management of musculoskeletal spinal conditions is coordinated with contemporary research. The course is an evidence-based approach to the examination, evaluation, diagnosis, prognosis and intervention of musculoskeletal spinal dysfunctions. Differential diagnosis and prognosis is interpreted in the light of orthopedic manual physical examination findings. The relationship between examination findings, biopsychosocial nature of spine pain, and intervention strategies is explored. The student continues to develop manual therapy skills integrated with patient education and therapeutic exercise.

PHYT M8620 PT Management of the Adult with Neurological Conditions I
Dr. Martha Sliwinski & Clare Bassile
This course is the first of a two-part series, which applies the Patient Management Model to neuromuscular conditions, in particular acquired brain injury disorders, stroke disorders and traumatic brain injury. Examination, intervention, progression and outcome assessment for stroke and TBI disorders are linked with diagnostic imaging and management via medical and surgical methods. Emphasis is placed on clinical decision-making and evidence-based practice in individuals with neurological conditions.

PHYT M8621 PT Management of the Adult with Neurological Conditions II
Dr. Clare Bassile & Martha Sliwinski
This course is the second of a two-part series, which applies the Patient Management Model to neuromuscular conditions. While the first course emphasized stroke, this course deals with all the other neuromuscular conditions that are commonly seen by physical therapists. This course is divided into 2 sections: Part A deals with spinal cord injury and Part B emphasizes traumatic brain injury demyelinating diagnoses, peripheral neuropathies, basal ganglia disorders, amyotrophic lateral sclerosis (ALS), post-polio syndrome (PPS), myasthenia gravis (MG), inflammatory myopathies, central nervous system tumors and vestibular disorders. Examination, intervention, progression and outcome assessment for individuals with these neuromuscular disorders are linked to the anatomical, physiological and pathological considerations. Emphasis is placed on clinical decision-making, critiquing impaired movement patterns and evidenced-based practice in individuals with spinal cord injury and neuromuscular disorders.

PHYT M8630 PT Management of Pediatric Conditions
Dr. Lisa Yoon & Margaret O’Neill
The American Physical Therapy Association Vision 2020 states that graduates will have the knowledge and skills for general physical therapist practice with patients of various ages from birth to late adulthood. This 16-week course focuses on motor development and physical therapy management of pediatric disabilities and chronic health conditions from birth to age 21 years. The course introduces students to typical and atypical motor development and the influence of body systems on the acquisition of motor skills during infancy, childhood and adolescence. This information is used as a basis for examination, evaluation, diagnosis, prognosis and intervention planning within the frameworks of the International Classification of Functioning, Disability, and Health (ICF) and the Guide to Physical Therapist Practice. Students administer and interpret norm and criterion referenced measures specific to pediatrics in order to identify impairments, activity limitations and participation restrictions. The plan of care is considered in a broad context including direct interventions, coordination, communication, and consultation and considers personal (child’s culture, family, personality, and age) and environmental factors (impact of legislation, practice setting, team collaboration, and service delivery models). A problem-based format with complex patient cases serves as the basis for developing an evidence-based plan of care.
PHYT M8634 Clinical Geriatrics
Dr. Laurel Daniels Abbruzzese
This course requires application of basic science information to clinical cases. Emphasis is on clinical reasoning, screening, examination, evaluation, diagnosis and prognosis, and development of a plan of care for older adults. Integration of knowledge of multiple systems and procedural interventions is expected. The course will provide the students with the necessary knowledge base and skills needed to improve the health, independence, and quality of life of the older population. Students will broaden their ability to recognize abnormal findings within the context of aging and apply evidence-based geriatric rehabilitation principles to their assessments and treatment of older adults. Special emphasis is placed on interpreting functional performance measures in order to manage balance deficits and falls in the aged, and prescribe targeted interventions for age-related syndromes and conditions.

PHYT M8636 Orthotics
Dr. Christopher Kevin Wong
This is the first of a pair of courses on orthotics and prosthetics in physical therapy. This course emphasizes knowledge of orthotic components and principles of biomechanics in the application, analysis, evaluation, and prescription of orthotics in the context of patient/client cases. The course will expand students’ knowledge of orthoses used in physical therapy for upper-extremity, lower-extremity, and trunk dysfunctions. Emphasis will be placed on applying biomechanical principles, the available evidence base, and clinical evaluation and management considerations underlying the clinical decision making of orthotic prescription and clinical care for individuals with a range of orthopedic and neurologic dysfunctions. Particular attention will be paid to developing gait assessment skills to allow evaluation of gait abnormalities that can be affected with orthoses including the determination of a comprehensive plan of care to address gait dysfunction.

PHYT M8637 Prosthetics
Dr. Christopher Kevin Wong
This is the second of a pair of courses on orthotics and prosthetics in physical therapy. This course emphasizes knowledge of prosthetic components and principles of biomechanics in the application, analysis, evaluation, and prescription of prosthetics in the context of comprehensive care of those with upper- and lower-extremity amputation. Students in this course will expand their knowledge of prostheses used in physical therapy for those with upper- and lower-extremity amputation. Emphasis will be placed on biomechanical principles, the available evidence base, and clinical evaluation and management considerations underlying the clinical decision making of prosthetic prescription and clinical care for the individual patient/client. Particular attention will be paid to developing gait assessment skills to allow evaluation of gait abnormalities that can be affected with prostheses including the determination of a comprehensive plan of care to address gait dysfunction.

PHYT M9041 Complex Medical Conditions
Dr. Wing Fu
This course is designed to enhance students’ clinical reasoning in managing complex patients and students’ ability to reflect on the development of their clinical reasoning. The course also covers knowledge to complete the cardiopulmonary content areas within the curriculum. The course offers students in their final year of the DPT program opportunities to think on their feet and reflect on their actions after they encounter simulated patients of different clinical domains in various clinical settings. The simulated patients are complex, and can be ambiguous, unpredictable and difficult to manage due to comorbidities across multiple clinical domains or contextual factors. Students are required to apply the four types of clinical reasoning that they learn in the Clinical Case Management course. The lecture portion covers patient-client management for individuals with cardiovascular and pulmonary diseases, with an emphasis on the complex post-surgical inpatient interventions including but not limited to LVAD, interventional cardiology, lung reduction for COPD and lung/cardiac transplantation.
COURSE DESCRIPTIONS - ADVANCED SEMINARS

PHYT M9015 Advanced Seminar in Orthopedics

Dr. Christopher Kevin Wong & Adjunct Faculty Dr. Evan Johnson

Students who want to build on the content from the required orthopedic courses may elect this course during the last semester of the DPT curriculum. This course explores advanced topics and skills in the area of orthopedic physical therapy that will provide the student with beyond entry-level skills and prepare them for clinical challenges ahead. The course is firmly rooted in the evidence-base with exploration of advanced topics and skills in the area of orthopedic physical therapy combined with experience in the orthopedic clinics at CUIMC. Students will take part in interactive discussion of current research that supports the application of advanced skills including a variety of osteopathic techniques learned and practiced in the class. Students have the opportunity to shape the content of the course by selecting an area of particular interest for them to present and teach. Previous course work emphasizing kinesiology, biomechanics, therapeutic exercise, and orthopedics will be integrated with emerging evidence and advanced techniques in the examination, evaluation, intervention, and prognosis of a variety of orthopedic conditions.

PHYT M9025 Advanced Seminar in Adult Neurorehabilitation

Drs. Clare Bassile & Ashwini Rao

Students who want to build on the content from the required Adult Neurorehabilitation courses may elect this course during the last semester of the DPT curriculum. Students are exposed to a variety of clients in different settings and allowed to further develop their clinical reasoning skills, hone their evidence-based examination of therapeutic interventions and verify the psychosocial impact of disability. This is a problem solving, case-based course. It promotes the synthesis of evidence from the neurological and movement science literature in critically evaluating current trends in examination, evaluation intervention and prognosis of a variety of neurological conditions. Clinical reasoning is promoted through three pathways: 1) observing and participating in a variety of health care practice settings (e.g. home care, hospitals, and out-patient departments); 2) understanding societal needs; and 3) appreciating the prevailing legislative environment. Students develop an evidence based paper formulated to serve as a resource for all course participants.

PHYT M9035 Advanced Seminar in Pediatrics

Drs. Lisa Yoon and Margaret O’Neil

Students who want to build on the content from the required pediatric course may elect this course during the last semester of the DPT curriculum. The course provides students with the opportunity to expand the breadth and depth of pediatric knowledge and apply the information to children with a disability. This course expands and strengthens the knowledge, clinical reasoning, and skill in managing pediatric clients with various disabilities. This course emphasizes examination, evaluation, prognosis and intervention within the context of the child’s culture, family, personality, and age. The impact of legislation, practice setting, team collaboration, and service delivery models are considered in developing the intervention plan. Evidence based practice is promoted through guided literature review. Students are exposed to various practice settings (acute care, early intervention, school-based, and rehabilitation) and intervention approaches.

PHYT M 9040 Clinical Case Management Seminar

Dr. Wing Fu

This course is designed to foster and enhance students’ clinical reasoning in managing patient cases. Its primary focus is placed on four types of clinical reasoning including hypothetico-deductive reasoning, pattern recognition, collaborative reasoning and ethical reasoning. The course will start with student-centered and faculty-led seminars with case examples to explore, elaborate and/or clarify the four types of clinical reasoning. The seminars will be followed by team-based case presentations and assignments,
which allow the students to not only share their own clinical experiences but also make their clinical reasoning explicit for customized and timely feedback.

**PHYT M9070 Medical Screening I**
*Dr. Michael Johnson*
This course, given at the end of the Year I curriculum, is the first of a three-part series that will provide students with the knowledge and clinical skills designed to assist in the medical screening of patients for conditions that may require further examination by a physician or a physician-extender. This course will focus on developing clinical decision-making skills in differential diagnosis related to the concept of threshold detection to identify impairments or "red flags" in medical screening that warrant referral to other professionals. An examination scheme is designed to promote efficient and effective collection of patient data. The laboratory component will focus on medical screening and diagnostic procedures commonly used by the physical therapist. Patient cases are presented to illustrate important medical screening principles. Professional communication with patients/clients and physicians is stressed throughout the course.

**PHYT M9071 Medical Screening II**
*Dr. Michael Johnson*
This intensive eight-week course provides students with continued development of medical screening concepts with a focus on specific systems of the body. Areas to be covered include gastrointestinal, endocrine, hematologic, and immune systems. Pharmacologic concepts for a portion of these areas will also be covered during this semester. As in Medical Screening I, students will be evaluated on a patient case-based approach. This course will emphasize utilizing clinical decision making/differential diagnosis skills effectively related to the concept of threshold detection to identify impairments or “red flags” in medical screening that warrant referral to other professionals. Professional communication with patients/clients and physicians is stressed throughout the course.

**PHYT M9072 Medical Screening III**
*Dr. Michael Johnson*
This 15-week course during the fall semester of the DPT III curriculum provides students with continued development of medical screening concepts with a focus on the evaluation and assessment of patient cases/scenarios. This will allow students to develop differential diagnosis and provide appropriate rationale, needs for physician referral and overall management of the scenarios. Using a patient case-based approach, the course will emphasize utilizing clinical decision making/differential diagnosis skills effectively and efficiently related to the concept of threshold detection to identify impairments or “red flags” in medical screening that warrant referral to other professionals. Existing medical screening guidelines will be reviewed and applied to the various cases, illustrating appropriate use of guidelines and potential limitations. Professional communication skills and strategies with patients/clients and physicians will be applied and practiced throughout the course.

**COURSE DESCRIPTIONS-Critical Exploration**

**PHYT M8704 Evidence Based Practice I**
*Dr. Ashwini Rao*
This first course in a three-part series provides students with the knowledge and skill to be an evidence based practitioner. The American Physical Therapy Association’s Vision 2020 calls for physical therapists to “render evidence based services throughout the continuum of care.” This course emphasizes, which is reinforced throughout the series, lifelong learning and the need for integration of the best available research into clinical practice, as well as the knowledge and understanding of the purpose and methods of research in the biomedical, social and basic sciences relevant to the practice of physical therapy. The course introduces skills of how to write answerable questions, efficient and structured methods to find, appraise and apply relevant research. Ethics, measurement theory, validity (internal and external) and study designs are discussed.
The second course in the series builds on Evidence Based Practice I, providing students with knowledge and skills to implement evidence based physical therapy. Students critically appraise primary and secondary sources, interpret descriptive and inference statistics, calculate clinical significance, establish a level of evidence, and make an appropriate clinical recommendation. Students, in consultation with faculty, will attend small group sessions to evaluate individual randomized control trials and systematic reviews.

PROFESSIONAL LEADERSHIP & PRACTICE

PHYT M8211 Professional Leadership & Practice I
Dr. Laurel Daniels Abbruzzese
This is the first in a series of four courses designed to educate students about the multiple dimensions of professional practice in contemporary physical therapy. This course introduces students to the standards, core documents and scope of professional physical therapy practice. Students will develop an understanding of physical therapy practice settings and the continuum of care, structure and governance of the American Physical Therapy Association, APTA Vision 2020, legislative action at the national, state and local levels, roles of the physical therapist assistant and social worker in patient/client management and psychosocial adaptation to illness and disability. Students will be asked to analyze and appraise a variety of professional issues and case studies and to represent their views during class discussions and in discussion boards.

PHYT M8212 Professional Leadership & Practice II
Dr. Laurel Daniels Abbruzzese
This 15-week course is the second of the four Professional Leadership and Practice courses. The course occurs in the second semester of the DPT curriculum and is designed to educate students about the multiple dimensions of professional practice in physical therapy. The course will examine the professional roles of the physical therapist as an educator, consultant, and health promotion advocate. Topics covered in the series include health promotion, adherence, behavior change, conflict resolution, motivational interviewing, and narrative medicine.

PHYT M8560 Professional Leadership & Practice III
Dr. Debra Clayton-Krasinski
This 16-week course, during the second year of the DPT curriculum, is the third in a series of four courses designed to educate students about the multiple dimensions of professional practice in contemporary physical therapy. The courses explore the professional roles of the PT as a clinician, educator and advocate and address trans-curricular themes including leadership, service, health promotion, advocacy, teaching and learning, interprofessional teamwork and self-reflection, culminating in the creation of a digital portfolio. The course series will include broad exposure to a variety of professional and personal development experiences and expect more in-depth engagement in the student’s chosen area of focus.

PHYT M8217 Professional Leadership & Practice IV
Dr. Laurel Daniels Abbruzzese
This 16-week course during the third year of the DPT curriculum is the final in a series of four courses designed to educate students about the multiple dimensions of a professional practice in contemporary physical therapy. These courses will expore the professional roles of the PT as clinician, educator and advocate and address trans-curricular themes including leadership, service, health promotion, advocacy, teaching and learning, interprofessional teamwork and self-reflection, culminating in the creation of a digital portfolio. The course will include broad exposure to a variety of professional and personal development experiences and expect more in-depth engagement in the student’s chosen area of focus. The course will focus on four content areas: Professional practice, marketing and business management, health care policy and health and wellness.
PHYT M8802_03 Spinal Cord Injury Spinal Mobility Elective
Dr. Martha Sliwinski
This course provides students with the opportunity to participate in an eight week program that has been established for people with spinal cord injuries living in the community. Students participating in this program receive training and work under the supervision of a licensed physical therapist. The program is designed to assist the participants in integrating exercise into their daily routine. Each participant receives an individualized fitness plan using equipment that they could apply for home use as well as equipment that will assist them in achieving independence in a home program. Students may also participate in this activity on a pro-bono basis.

PHYT M8812 Elective in Vestibular Rehabilitation
Dr. Clare Bassile
This elective is offered to students who have an interest in vestibular rehabilitation and seek an introduction to this emerging field of clinical expertise. The course introduces the student to signs and symptoms of vestibular dysfunction. Assessment techniques, types of recovery and interventions directed toward the different types of dysfunction, both peripheral and central are introduced and practiced by the student.

PHYT M8815 Pelvic Health
Adjunct Instructor Dr. Lila Abbate
Many women's health issues are frequently under-reported and under-diagnosed based on common misconceptions and social stigmas associated with these sensitive and personal conditions. As we move into our doctoring profession, health and wellness can be part of the cornerstone of women's health specialty. However, appropriate and timely diagnosis and treatment is essential. Physical therapists are an integral part of the multidisciplinary approach assisting women to overcome and manage health issues. This course is designed to enable students, as entry-level clinicians, to improve care for female clients which occur more frequently in women or present differently in women. The course will include health across the lifespan, obstetrics and gynecology, chronic pelvic pain, bladder and bowel dysfunction, nutritional dysfunction, cancer rehabilitation, and fibromyalgia. Topics will primarily target women from adolescents, childbearing, peri-menopause, and menopause, post-menopausal and geriatric years. The women's health specialty will also cover topics for the male and pediatric populations.

PHYT M8825 Sports Rehabilitation
Adjunct Instructor Dr. Rami Said, Coordinator
The elective is an introduction for students wishing to gain competencies related to physical therapy for the high school, collegiate, professional, or weekend athlete. It is intended to give the student an understanding of sports-related issues that affect the delivery of physical therapy for the competitive athlete across the lifespan. Lectures on special sports-related topics, combined with laboratory experiences, provide the student an opportunity to gain specific sports knowledge and perspectives on the field for future practice. The elective emphasizes recognition of characteristic patterns of injury, differential diagnosis, and red flags for various, but specific athletic populations, including when to refer to other health care professionals, recognizing differences in the delivery of care, therapeutic exercise progressions, patient education and self-care. The majority of the course will be lectures by sports professionals in their respective fields of expertise, emphasizing various aspects of sports medicine physical therapy, such as the roles of sports nutrition, sports psychology, surgical considerations, strength and conditioning, athletic training and sport-specific physical therapy rehabilitation. There will be some laboratory content offered, depending on the speaker. At least one day of laboratory will take place at the Baker Athletics Complex of CU. This day will consist of learning various taping techniques for the sports athlete, hosted by Columbia University’s Department of Athletic Training.
PHYT M8830 Hand & Upper Extremity Rehabilitation
Adjunct Associate Professor Dr. Susan Michlovitz
This elective course will focus on the examinations and interventions used for patients who have injuries and diseases that result in impairments, functional loss and disability of the hand and upper extremity. Orthopedics will serve as a starting point for discussion. Discussions will include case examples to illustrate the non-operative and post-operative care of common tendon, nerve and bone disorders. Case examples of examination and intervention for specific pathologies will include but not be limited to: Hand, wrist and elbow fracture; dislocations and sprains, flexor and extensor tendon injuries and tendinopathies; osteoarthritis and traumatic arthritis of the hand; Dupuytren’s contracture, trigger finger, and wrist ganglions. Course format will include case presentations, discussions, and laboratory experiences including orthotic fabrication with low temperature thermoplastics. Selected readings from peer-reviewed journals will be suggested.

PHYT M8832 Foot & Ankle Rehabilitation
Adjunct Faculty Dr. Cameron Gomez
This elective course teaches the student detailed biomechanical evaluation and manual physical therapy intervention of the lower limb and foot/ankle joints. The application of clinical biomechanics to the assessment and treatment of abnormal biomechanics and its resulting joint and soft tissue dysfunction will be discussed, demonstrated, and practiced. The course builds upon content taught in prior orthopedic classes. Students will learn to formulate a differential diagnosis for a variety of foot and ankle complaints that may be seen in a direct access setting. A biomechanical assessment of the foot and ankle will be used to determine appropriate manual treatment techniques. Students will learn to observe gait and to assess the neuromuscular control of the foot and ankle in both weight-bearing and non-weight-bearing situations. Movement analysis, x-ray, diagnostic imaging, and clinical videos will be used as teaching tools. Evidence-based practice will be highlighted and dealing with the dearth of good evidence of the foot and ankle will be rationalized. The course will be 30% didactic and 70% lab-based, ‘hands-on’ practical manual therapy.

PHYT M8833 Craniofacial Pain of Cervicogenic Origin: Headaches & Temporomandibular Disorders
Adjunct Faculty Dr. Jeffrey Mannheimer
Physical therapy education relative to an understanding of the various types of headaches, orofacial pain and temporomandibular disorders (TMD), as well as their inherent pathophysiological mechanisms, are not commonly covered in-depth within an entry-level curriculum. This specialty elective has been designed to fill that void and provide knowledge as well as training in definitive evaluative and therapeutic skills unique to this clinical field. This course is designed to provide the information and necessary skill to delineate the major types of headaches, orofacial pain, movement disorders and associated symptoms that originate from the craniofacial and temporomandibular regions from those of a cervicogenic and/or comorbid origin.

PHYT M8835 Performing Arts PT
Adjunct Faculty Dr. Cameron Gomez, Coordinator
This elective course is designed as an introduction for students wishing to gain competencies related to physical therapy for dancers. Target patient population will be ballet, modern and post-modern dancers. The elective will help students begin to develop a template for structuring assessment and interventions with the above patient population, as well as cultivate the independent clinical reasoning skills required in a direct-access environment. The elective will assist the student in applying the principles and skills of physical therapy to specific patient populations (dancers, dance teachers and choreographers) in settings specific to their professions and emphasizing lifespan issues in the field. The condition of direct access in on-site facilities enables patients to contact PT quickly when troubles arise and encourages the clinician in clinical decision-making early in the history of an injury or condition. The elective will emphasize recognition of certain characteristic patterns of injury, differential diagnosis and red flags, including when to refer to other health care professionals. Two days of the course will take place at Westside Dance Physical Therapy and the School of American Ballet. The course will be 40% didactic and 60% lab-based hands-on in both settings.
PHYT M8843 Teaching Practicum in Anatomy-Lab
Dr. Stacy Kinirons
This elective during the third year of the DPT curriculum provides students with an insight into laboratory teaching. Students will serve as teaching assistants in nine three-hour Gross Anatomy (PHYT M8100) laboratory sessions. An understanding of the roles of a teaching assistant will enable the student to make informed decisions regarding their potential pursuit of a career path in academia. Students will guide and conduct dissections, identify structures, and teach. Students will receive feedback from the students that they instruct and faculty member regarding their performance.

PHYT M8845 Teaching Practicum in Anatomy-Lecture
Dr. Stacy Kinirons and faculty
This elective during the third year of the DPT curriculum provides students with an overview of classroom teaching. Aspects of teaching, including course design, classroom management, and assessing students, will be considered with an awareness of different learning and teaching styles. Students will engage in several teaching experiences in Gross Anatomy (PHYT M8100) to gain insight into the varied roles of a teacher. Students will plan and implement one Gross Anatomy lecture and lab, conduct office hours, construct exam questions, and assist with the administration and grading of an exam. Students will work closely with the faculty member(s) to complete the course requirements. Students will receive feedback from the students that they instruct and the faculty member regarding their performance.

PHYT M8847 Teaching Practicum-Small Group
Dr. Stacy Kinirons and faculty
This elective during the third year of the DPT curriculum provides students with an insight into small group teaching. Students will serve as teaching assistants in four two-hour Gross Anatomy (PHYT M8100) review sessions, one laboratory review session, and optional tutoring experiences. An understanding of the roles of a teaching assistant will enable the student to make informed decisions regarding their potential pursuit of a career path in academia. In coordination with faculty and other teaching assistants, students will run learning activities and answer questions. Students will receive feedback from the students they instruct and faculty member(s) regarding their performance.

PHYT M8849 Service Learning I and PHYT M8850 Service Learning II
Dr. Martha Sliwinski & Lisa Yoon
The course is designed to provide physical therapy students with an international experience under the supervision of licensed physical therapists in a country with underserved communities in need of a broad range of health care and health care education services. Students are required to reflect on their own cultural background and the cultural practices in the international setting that impact the delivery of healthcare services. Students will have an opportunity to apply previously learned knowledge and skills as it applies to the needs assessed in the community for pro bono service. Health risk issues related to prevention will be assessed and physical therapy services applicable to the needs will be designed. The number of students participating in the elective is decided upon completion of all application materials and proper student faculty ratio for planned activities and trip safety.

PHYT M8853 Research Practicum I
Dr. Jacqueline Montes, Coordinator & Program Faculty
Research Practicum I is an eight-week elective designed to provide students with the opportunity to integrate the knowledge obtained in the evidence-based courses with supervised hands-on research experience. The elective provides the student with foundational knowledge and skill in the development and implementation of a research protocol targeting the student’s ability to synthesize and organize finding into a cogent written and/or oral research presentation. During this semester, students will work to clarify the research question, conduct a thorough search of the literature, become familiar with methods for data collection and analysis, and if applicable, assist the faculty advisor(s) with data collection.
PHYT M8854 Research Practicum II
Dr. Jacqueline Montes, Coordinator & Program Faculty
Research Practicum II is a 16-week elective that builds on PHYT M8853 (Research Practicum I) and is designed to provide students with the opportunity to integrate the knowledge obtained in the evidence-based courses with supervised hands-on research experience. The elective provides the student with foundational knowledge and skill in the development and implementation of a research protocol targeting the student’s ability to synthesize and organize finding into a cogent written and/or oral research presentation. During this semester, students will work to complete data collection and analysis in preparation for presenting their work in the third year.

PHYT M8855 Research Practicum III
Dr. Jacqueline Montes, Coordinator & Program Faculty
Research Practicum III builds on PHYT M8854 (Research Practicum II) and is designed to provide students with the opportunity to integrate the knowledge obtained in the three required evidence-based courses with supervised hands-on physical therapy research experience. The elective provides the student with foundational knowledge and skill in the development and implementation of a research protocol targeting the student’s ability to synthesize and organize finding into a cogent written and/or oral research presentation. Students are required to orally present their research finding at the PT program’s Annual Columbia University Research Day. Students, in conjunction with faculty, are strongly encouraged to submit a paper to a professional journal and/or present a poster/oral presentation to a professional organization.

PHYT M8557 Management of the Running Athlete
Dr. Colleen Brough
This course is designed to prepare students for evaluating and treating the running athlete. It includes an overview of the foot and ankle mechanisms, lower quarter strength and flexibility screens, use of the Functional Movement Screen, video analysis and relevant pathomechanics observed during running. Students participate in training sessions required for the clinic including HIPAA and blood-borne pathogens training. Students are introduced to the clinical setting by evaluating patients in the context of a running clinic, the Columbia RunLab.

PHYT M8860 Independent Study-Professional Leadership and Practice:
Dr. Mahlon Stewart
This elective course is an extension of the Professional Leadership and Practice course series and is designed to provide students with the opportunity to personalize their education by exploring an area of interest in one or more trans-curricular themes including: physical therapist as educator, health promotion, social responsibility, mentoring, leadership, advocacy, career development, critical inquiry and decision-making, professionalism and interprofessional studies. The purposes of the elective are: 1. To extend student learning activities beyond the classroom; 2. Integrate and evaluate learning related to overall curriculum themes and objectives; 3. Foster independent, self-directed student learning for life-long professional development and 4. Foster reflective practice. Currently there are three sections:

**Perspectives on Practice:** This course is scheduled throughout the three-year curriculum. Students can enter at any point but to receive credit, they must successfully complete 15 hours of instruction and a culminating project. Didactic sessions are offered approximately once per month during the fall and spring academic sessions. All course work must be completed by the fall semester of the DPT III year. Graduate DPT students, in conjunction with a faculty advisor, will organize, manage and direct the course. This course is an extension of the Professional Leadership and Practice series and is designed to provide students with the opportunity to personalize their education by exploring an area of interest in one or more trans-curricular themes including but not limited to: physical therapist as educator, health promotion, social responsibility, mentoring, leadership, advocacy and career development. The elective includes
broad exposure to a variety of professional and personal development experiences for in-depth engagement in the student’s chosen area of focus.

**CancerFit:** This course offers students the opportunity to participate in and guide weekly exercise classes for breast cancer patients and survivors. Students have exposure to the clinical setting, design and the opportunity to design and lead exercise training sessions and make recommendations for regressions and progressions based on patient responses to exercise. An introduction to current literature describing the benefits of exercise in this patient population is also included.

**CanWarriors Wellness Program:** This elective course is designed to introduce students to the diverse population of children, adolescents, young adults and families in the pediatric oncology clinic. The elective will serve as a catalyst for further development in understanding, learning, and developing research questions unique to this patient population within the context of a physical therapist’s role in a wellness program. This course offers students the opportunity to participate and guide weekly wellness classes for pediatric oncology patients and survivors under the supervision and direction of a faculty member. Students will have exposure to the clinical setting, including interacting with patient and families by designing and leading wellness activities in a group class or individually to provide consultation services. Students will also have an opportunity to engage in interprofessional collaborations with other healthcare and child life professionals.

**PHYT M9005 Topics in Cardiopulmonary**  
**Adjunct Faculty Kim Stavrolakes**

Students who want to build on the content from the required cardiopulmonary course may select this elective during the last semester of the DPT curriculum. The course expands and strengthens the knowledge, clinical reasoning, and skill in managing cardiopulmonary clients with various diagnoses. This course emphasizes examination, evaluation, prognosis and intervention within an acute care setting in both inpatient and outpatient. Observations in the outpatient settings may include cardiac and pulmonary rehabilitation evaluation, oxygen titration, pulmonary function testing, cardiopulmonary exercise test, pulmonary clinic, cystic fibrosis clinic, lung transplant rounds, LVRS. Inpatient ICU VAD or ECMO observation, potential to observe a surgery. Practice setting, team collaboration, and service delivery models are considered in developing the intervention plan. Evidence based practice is promoted through guided literature review.

**COURSE DESCRIPTIONS—ELECTIVES (NO CREDIT)**

**PHYT M8804 Integrated Therapies**  
**Adjunct Instructors William Gallagher & Richard Sabel**

Over the past several decades, physical therapists have redefined rehabilitation to include unconventional therapeutic techniques drawn from disciplines such as Tai Chi Chuan, Yoga and Feldenkrais. Practitioners of these disciplines have long realized the preventative and restorative benefits of mind-body practice and scientific evidence is emerging to support their techniques. In response, consumers and employers increasingly seek clinicians who integrate these approaches with conventional rehabilitation. The integrative physical therapist studies conventional and alternative practices, finds what works, and discovers new ways of bringing them together. Concentrated on promoting health and the prevention of pain or disability, the integrative practitioner neither rejects conventional medicine nor accepts alternative medicine without serious evaluation. This course will examine the evidence for the integration of mind-body disciplines into rehabilitation, emphasizing the clinical application of Tai Chi Chuan, Qigong, Feldenkrais and Yoga and will touch on other approaches including Alexander technique, Guided Imagery/Visualization, Middendorf & Laban Bartenieff. This course is meant to engage the critical thinking needed to sift through the various options and maximize the comfort, function and well-being of
our patients and clients. The course will consist of 25% didactic work, through active learning approach, and 75% clinical application and performance of evaluation and treatment interventions.

**PHYT M8800 Medical Spanish**

*Adjunct Faculty Michael Shane*

Medical Spanish, across all disciplines, has gained support as the population of limited English proficiency (LEP) patients has grown. Although electronic communication devices may aid the clinician during the patient encounter, nothing can substitute for comprehensive training in basic anatomy and communication in the target language. Appreciating different Hispanic cultures and their approaches to healthcare also has a positive impact on the quality of care, compliance, and affirmative clinical outcomes. The course will develop in students interviewing and conversational skills. Target vocabularies are related to patient medical history, PT assessment and goals. Cultural competency is a central component. Two sections are offered: Basic and Intermediate.

**CLINICAL EDUCATION**

**PHYT M8003 Clinical Education Seminar I**

*Drs. Colleen Brough and Mahlon Stewart, Directors*

This course is the first in a series of four clinical education seminars designed to prepare students for their full-time clinical education experiences. It includes an overview of the clinical education program, policies and procedures, and the site selection process. Students participate in training sessions required for the clinic including Health Insurance Portability and Accountability Act (HIPPA) and blood-borne pathogens training. Students are introduced to the practice sites available for the first clinical education experience and participate in the placement process.

**PHYT M8004 Clinical Education Seminar II**

*Drs. Mahlon Stewart and Colleen Brough, Directors*

This is the second of four seminars that prepare students for their full-time clinical education experiences, including fulfillment of all clinical site requirements. Students participate in training sessions required for the use of the Clinical Performance Instrument. Sessions will also address sharing and soliciting feedback and preparing a clinical in-service.

**PHYT M8805 Clinical Education Seminar III**

*Drs. Mahlon Stewart and Colleen Brough, Directors*

This third seminar offers the opportunity for the student to reflect on the challenges and highlights of the first clinical education experience. Facilitated discussions address such topics as initiative, communication and problem solving in clinical scenarios. Expectations for the intermediate clinical education experience are discussed. Students are introduced to the practice sites available for the intermediate clinical experience and participate in the placement process. Students set individualized goals and fulfill clinical site prerequisites. Specialized terminal clinical education experience opportunities are introduced and discussed.

**PHYT M8006 Clinical Education Seminar IV**

*Drs. Mahlon Stewart and Colleen Brough, Directors*

This final seminar is designed to prepare the student for the full-time clinical education experience and for careers in physical therapy. It offers the student an opportunity to reflect on the challenges and highlights of the second clinical education experience. Expectations for the final, more specialized terminal clinical experience are discussed. Students are introduced to the practice sites available for the terminal clinical education experience and participate in the placement process. Students set individualized goals and fulfill clinical site prerequisites. This final seminar also reviews resume writing, interviewing techniques and provides an overview of the National PT Licensing Examination (NPTE).
PHYT M8901 Clinical Education Experience
Drs. Colleen Brough & Mahlon Stewart, Directors
The first in a series of three full-time clinical education experiences. Students in good academic standing who have satisfactorily completed all prerequisite professional courses prior to Fall IIB of the DPT curriculum are assigned to a clinical center for an eight-week, full-time clinical education experience. This is the first opportunity to perform supervised practice of newly acquired clinical skills in a direct patient care environment on a full-time basis. Students are required to give an in-service presentation in partial fulfillment of the requirements of this experience.

PHYT M8902 Intermediate Clinical Education Experience
Drs. Colleen Brough & Mahlon Stewart, Directors
This is the second in a series of three full-time clinical education experiences. Students in good academic standing, who have satisfactorily completed all first and second year coursework are assigned to a clinical center for a ten-week full-time clinical experience. This affiliation provides students with an opportunity to further develop skills used in the first clinical education experience and to practice new skills in a direct patient care environment. A diversity of clinical placement sites is available, including more specialized practice settings. Students are required to give an in-service presentation in partial fulfillment of the requirements of this experience.

PHYT M9200 Terminal Clinical Education Experience
Drs. Colleen Brough & Mahlon Stewart, Directors
This is the third and final clinical education experience. Students in good academic standing who have satisfactorily completed all prerequisite professional courses are assigned to one or two clinical site(s) for a total of 18 weeks of full-time clinical education. This final clinical education experience provides students with an opportunity to further develop skills used in the first and intermediate clinical experiences as well as practice new skills in a direct patient care environment in preparation for entry-level practice. Students are required to give an in-service presentation.

**GRADES AND POINTS**

A grade of “C+” or above or a grade of “pass” (P) counts for credit for successful completion of a course toward the DPT degree and is accepted as the basis for advancement to subsequent courses.

In the computation of grade point averages for the DPT program, quality points are awarded on the following scale:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>98 – 100</td>
<td>4.33</td>
</tr>
<tr>
<td>A</td>
<td>94 – 97</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>90 – 93</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>83 – 86</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>80 – 82</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>75 – 79</td>
<td>2.33</td>
</tr>
<tr>
<td>F</td>
<td>0 – 74</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Quality level of achievement:** A+: Reserved for highly exceptional achievement; A: Excellent, outstanding achievement; A-: Very good achievement; B+: Solid achievement; B: Good; B-: Acceptable but below what is expected at the graduate level; C+: Marginal achievement; F: Failure to meet graduate standards.

Pass (P) A “pass” is assigned for successful completion of the course requirements, as documented in the course syllabus, for courses that use a pass/fail grade scale. A grade of “P” is not included in the computation of the GPA.
Students are expected to complete all course assignments, examinations and clinical education experiences on time. There is no automatic grade of “incomplete” (INC). A student will receive an “F” grade in any course in which the student fails to pass the course standards as described by the instructor and stated in the course syllabus. As the curriculum is sequential, a failure in any course including clinical education may lead to withdrawal from the program. All clinical education experiences must be successfully completed before the DPT degree is awarded.

Students must be in good academic standing with a minimum GPA of 3.000 to enter into the clinical education portion of the curriculum.

The Program in Physical Therapy Handbook given to each incoming class outlines DPT academic standards as well as the due process procedure related to the student appeal process. A student who believes that due process was not followed related to academic standing in the program has the right to appeal.

**ESSENTIAL FUNCTIONS**

Columbia University’s Program in Physical Therapy is dedicated to the education of students who will serve at the forefront of health care in an empathetic and effective manner. Successful completion of the program requires acquisition of didactic knowledge, skills, and professional behaviors. The purpose of the essential functions is to delineate the cognitive, affective and psychomotor functions that the student must demonstrate in order to complete this program. These functions are necessary to enable the student to perform as a competent physical therapist in general practice.

The essential functions listed below must be performed safely, consistently and efficiently in order to enter the program, continue studies and graduate. At time of matriculation, students will be asked to sign an Essential Functions Document which is incorporated into the Student Handbook.

A student who discloses a properly certified disability in a timely manner and follows the written procedures of Columbia University’s Office of Disability Services will receive reasonable accommodation. See [website](http://example.com) for more information.

Students must possess aptitudes, abilities, and skills in five areas:

**Intellectual/Conceptual, Integrative, and Qualitative Skills**

Students must have the ability to measure, calculate reason, analyze, and synthesize information in a timely manner. Problem solving and diagnosis, including obtaining, interpreting, and documenting data are critical skills. These skills allow the student to make proper assessments and sound judgments, and appropriately prioritize therapeutic interventions to measure and record patient outcomes. In addition, students must be able to comprehend three-dimensional spatial relationships of anatomic structures.

**Communication Skills**

Students must have the ability to complete reading assignments, search and evaluate the literature, complete written assignments and maintain written records. They must be able to communicate in oral and written English effectively, efficiently, and sensitively. They must be able to communicate clearly in order to provide and elicit information, describe accurately changes in mood, activity and posture, and understand verbal as well as nonverbal communication. These skills must be performed in clinical settings as well as in the classroom. For example, students must be able to communicate rapidly and clearly during interdisciplinary meetings, elicit a thorough history from patients, and communicate complex findings in appropriate terms to patients, family and various members of the health care team.

**Behavioral/Social Skills and Professionalism**

Students must demonstrate attributes of empathy, integrity, concern, interest and motivation. They must possess the emotional health required for full use of their intellectual abilities, the exercise of sound judgment, the prompt completion of all responsibilities attendant to patient care, and the development of
mature, sensitive, and effective relationships with patients. They must be able to adapt to ever-changing environments, display flexibility, and learn to function in the face of uncertainties and stresses which are inherent in the educational and patient-care processes.

Students must be able to identify and communicate the limits of their physical, emotional, and cognitive abilities to others and implement appropriate solutions.

Students must maintain a professional demeanor. They must possess adequate endurance to tolerate physically demanding workloads and to function effectively under stress. They are expected to accept appropriate suggestions and criticism and respond with suitable action.

**Motor Skills**
Students must have adequate motor skills to provide general care and emergency treatment to patients. They must have ample motor function to elicit information from patients by palpation, auscultation, percussion, and other evaluative procedures. Students must have the ability to demonstrate and practice classroom activities, to perform cardiopulmonary resuscitation, and to lift, guard and transfer patients safely.

Physical therapy interventions require the coordination of gross and fine movements, balance, and functional use of the senses. Students must have the manual dexterity and the ability to safely engage and modulate procedures involving grasping, fingering, pushing, pulling oscillating, holding, extending and rotating.

**Sensory/Observation Skills**
Students must be able to obtain information from lectures, laboratory dissections and demonstrations in laboratories and lectures. They must be able to monitor digital and waveform readings and graphic images to determine patient conditions. They must be able to supervise a patient accurately at a distance and close at hand.

**ACADEMIC AND CLINICAL INTEGRITY AND PROFESSIONAL DEVELOPMENT**

It is expected that a student’s personal values of honesty, integrity, and responsibility will be maintained while enrolled in the program and will be incorporated into their professional values. In the spirit of establishing a community for learning, students are expected to conduct themselves according to specified behavioral standards.

In the academic and clinical settings, students are expected to carry out assigned responsibilities with discretion and integrity and will conduct themselves in a professionally responsible manner. Continuing development of appropriate professional behaviors is required for advancement throughout the program.

The program faculty is dedicated to enabling students to become respected professionals. To this end, the program has adopted certain core values espoused by the American Physical Therapy Association, which are expected outcomes of the program. The development and maintenance of professionalism has also been defined by the faculty. Opportunities to reflect on these behaviors are provided through self-assessment, peer and instructor assessment throughout the program’s academic and clinical curriculum. They have been incorporated in all course syllabi as behavior objectives in the affective domain.

The philosophy and expectations related to the above are clearly delineated in the *Student Handbook*.

*The faculty of the Program in Physical Therapy reserves the right to withdraw, or to deny admission, registration or graduation to any student who in the judgment of the faculty is determined to be unsuited for the study and practice of physical therapy.*
CLINICAL EDUCATION AFFILIATIONS

The program has more than 800 sites nation-wide and abroad. The listing is not inclusive and sites vary from year to year depending on staffing patterns and other factors associated with the ever-changing health care environment. Some sites are offered for every clinical experience; others, more specialized in nature, may only be available for Clinical Education II and/or the terminal clinical experience. The Directors of Clinical Education are receptive in working with a student to develop a new affiliation site to meet student needs and interests either geographically or in a specialty of practice. Learn more about our clinical affiliation sites.

PRE-CLINICAL DRUG TESTING POLICY

In an effort to continue the Medical Center’s commitment to providing the highest quality health care services to students and their patients, the clinical schools within Columbia University Medical Center have a required drug testing policy prior to students beginning their first clinical education experience. This policy is intended to offer a proactive approach by providing early identification and intervention before the consequences of substance abuse adversely impact a student’s health, care of patients, or employability. The policy emphasizes the importance of student confidentiality, and employs intervention and treatment rather than formal disciplinary action, sanctioning, or documentation upon a student’s academic record. The drug testing policy is implemented through the Student Health Service in partnership with Sterling Infosystems, Inc., who is also responsible for all pre-employment drug testing for Columbia University Medical Center employees. Students are tested in the spring or summer of Year I prior to the start of Clinical Education I in fall of Year II.

A completed description of the Pre-Clinical Drug Testing policy and procedures can be found on the Student Health Services website and is incorporated into the Student Handbook for each incoming class.

REGISTRATION AND EXPENSES

All students are asked to give their Social Security number when registering in the University. International students should consult with the International Students and Scholars Office (ISSO) on the main campus (Morningside) of Columbia University at 524 Riverside Drive. Email isso.columbia.edu, phone 212-854-3587.

Students who are not citizens of the US and who need authorization for special billing of tuition and/or fees to foreign institutions, agencies, or sponsors should go to the ISSO with 2 copies of their sponsorship letter. Special billing authorization is required for students whose invoices are to be sent to a third party for payment. University charges such as tuition, fees and housing are due and payable in full, minus any authorized financial aid and scholarship support prior to the start of each academic semester (fall, spring and summer). Students who do not pay the full amount when due may be assessed a late fee. Procedures describing billing and payment options can be found on the website of the Office of Student Financial Services.

It is University policy to withhold diplomas, and transcripts until all financial obligations have been met. Tuition is set annually by the Board of Trustees. The program tries to keep tuition constant for each incoming class during Years I and II. Year III tuition is less as students spend only the fall semester at Columbia in didactic course work. The entire spring semester is comprised of the terminal clinical experience at affiliation sites across the country or abroad.

The Student Health Service fee contributes to the cost of operating the Student Health Service. The medical insurance premium can be waived if students can show proof of comparable hospital coverage.
Tuition for the Class of 2018-19 has been set at $18,500 per semester and $500 for the summer. ($36,500) See other costs associated with matriculation, including health insurance and estimated academic and living expenses in the estimated student budgets for Year I, Year II and Year III.*

* Projected figures, subject to change without notice.

**FINANCIAL ASSISTANCE**

No student is considered for financial assistance until accepted into the DPT program with payment of the $1000 non-refundable matriculation deposit.

Federal and State regulations restrict all federal aid to citizens or permanent residents of the United States. The University requires international students applying for admission to present evidence of sufficient funds to cover all tuition, fees, books and living expenses for their course of study in the program.

The financial aid policies of the Program in Physical Therapy are designed to assist students to secure funds to help pay their education and related expenses. Assistance is in the form of grants, loans, scholarships, and/or Federal Work-Study provided by federal, state, university, and/or private sources. Financial aid is based on merit, financial need, enrollment status and availability of funds. This assistance is supplemental to the student's financial resources. See the [Physical Therapy Financial Aid Handbook 2018-2019](#).

**Program Merit Scholarships**

The amount of the scholarships varies on a yearly basis depending on program support, alumni giving and other donations by friends of the program. The amount of support available determines the level of undergraduate academic achievement (minimum cumulative grade point average) on which the scholarship award will be based. Applicants do not apply for these scholarships. These scholarships are awarded as part of the acceptance letter and are based on the final transcript that indicates receipt of the baccalaureate degree and cumulative grade point average. Applicants who have not received their baccalaureate degree at the time of acceptance receive a provisional scholarship award. The scholarship is finalized with program receipt of the final transcript that indicates conferral of the degree and final cumulative average.

The award is renewed yearly, under the condition the student maintains a minimal grade point average of 3.350 during each semester and throughout the 3-year program.

**Yellow Ribbon Program**

An initiative authorized by the Veterans Educational Assistance Act of 2008 in which educational institutions provide eligible student veterans with a tuition waiver or grant matched by the U.S. Department of Veteran Affairs. The program's contribution of support for each eligible veteran is $7,000 in 2018-19.

**Clinical Fellowship**

Fellowships are awarded to students for the second clinical education experience and/or for the terminal clinical experience. The fellowships of varying dollar support are used to help defray costs for travel and living expenses for students seeking challenging affiliations nation-wide. Students apply for these fellowships, which are competitive, based on certain criteria. The final determination for award is based on the recommendations of the Directors of Clinical Education.

**Other Resources**

The website of the [Office of Student Financial Services](#) provides additional scholarship information.
WITHDRAWAL AND ADJUSTMENT OF FEES

With the passage of the Higher Education Amendments of 1992 (Public Law 102-325), the University is required to implement a pro rata refund policy for students who do not register, or who withdraw or otherwise fail to complete an enrollment period. Refunds are a percentage of charges (including tuition and housing) assessed based on the date of the student’s last day of attendance as reported by the Director of the Program. All students are charged a $75.00 withdrawal fee.

Fees not subject to refund include: health service, medical insurance, course-related fees, program fee, international student services charge, late registration fee, late payment fee, finance charge and computer fee.

Refunds are determined as follows:

<table>
<thead>
<tr>
<th>Week</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st week</td>
<td>100%</td>
</tr>
<tr>
<td>2nd week</td>
<td>90%</td>
</tr>
<tr>
<td>3rd week</td>
<td>80%</td>
</tr>
<tr>
<td>4th week</td>
<td>80%</td>
</tr>
<tr>
<td>5th week</td>
<td>70%</td>
</tr>
<tr>
<td>6th week</td>
<td>60%</td>
</tr>
<tr>
<td>7th week</td>
<td>60%</td>
</tr>
<tr>
<td>8th week</td>
<td>50%</td>
</tr>
<tr>
<td>9th week</td>
<td>40%</td>
</tr>
<tr>
<td>After 9th week</td>
<td>0%</td>
</tr>
</tbody>
</table>

HOUSING

The Health Science Housing Office serves as the central assignment office for all University owned housing on the CUIMC campus. In addition, the office runs the day to day operations of the residence halls.

Students enrolled and matriculated as full-time students are eligible for University Housing. A variety of housing options for both single students and couples are available. All accommodations are “wired” and equipped with a data/voice jack, which provides access to both the campus telecommunications system and campus computer network.

Application for housing is completed electronically. Housing is not guaranteed. Student housing is assigned on the basis of distance from the campus, and access to alternative housing or resources for commuting. First priority is given to students moving to New York from the greatest distances; second priority to students from further sections of New York state and the metropolitan area; third priority to students presently living nearer to campus.

Specific information on types of housing available and costs can be found on the Housing Office website.

Students interested in off-campus housing near the medical center or are wait-listed for University housing have the resources of a leasing agent within the Housing Office. Students should contact Rocio Calixto, who can provide advice, resources and a database of available housing.

PARKING

The University operates several parking garages. Students who do not live in University owned housing and commute to the Health Science campus are eligible to apply for parking. Contact the CUIMC Parking Office for details and an online parking application.
RECREATIONAL/ATHLETIC FACILITIES

Bard Hall Commons is the center for activities on the Health Sciences campus. The Commons includes offices, study areas and lounges, the dining room, and the Bard Athletic Center. In addition, the Wellness Center offers a variety of programs to promote health and well-being.

The **Bard Athletic Center**, located on campus, features a 20-yard swimming pool, two levels of new cardio equipment, one squash court, a gymnasium, an aerobics/multi-purpose exercise room, lockers, showers, and saunas. Students can develop a workout program using the facility's treadmills, ellipticals, stationary bicycles, rowing machines, stair climbers, and dumbbell sets and benches. The center also offers a number of scheduled exercise programs throughout the year. The facility is handicapped accessible. Students can call the Office of Housing Services (212-304-7000) or the Bard Athletic Center (212-304-7010) for additional information regarding services, programs, and fees.

Students also have access on the Morningside Campus, main campus of Columbia University, to the Marcellus Hartley Dodge Physical Fitness Center, which features two full-size gyms, two swimming pools, seventeen squash and handball courts, a fully-equipped exercise and weight room, judo-karate room, fencing room, wrestling room, indoor track, and two saunas. There is an additional fee to join this fitness center. Also on the main campus are four tennis courts and a platform tennis court. Baker Field, Columbia’s principal outdoor athletic facility located at the northern tip of Manhattan, features a football field and stadium, a baseball field, soccer field, running track, seven tennis courts, and several practice fields.

OTHER STUDENT ACTIVITIES AND SERVICES

**P&S Club**
Students enrolled on the Health Sciences campus may join the P&S Club, which currently sponsors approximately 70 extracurricular organizations such as the Bard Hall Players (a very active theater group), Dance Haven, Musicians Guild, Photography Club, Roadrunners, basketball, rugby football, soccer and squash clubs, coffeehouse cabarets, and moonlight cruises. A roster of CUIMC activities is sent each week to the student body. Learn more about the [P&S Club](#).

**The Medical Center Bookstore:**
The Bookstore is located in the Hammer Health Science Center, 711 West 168th Street. Required textbooks may be purchased there, as well as educational supplies.

**Shuttle Service Available to Students:**
A shuttle bus runs between the Health Sciences campus, Morningside campus, and Harlem Hospital at regular intervals during the day and evening hours at no cost to the student. The Health Sciences Security Office provides transportation to students between 6:00 p.m. and 8:00 a.m. to adjacent residential buildings, Medical Center facilities, the George Washington Bridge Bus Terminal, and other locations in the Medical Center vicinity. Complete details are available on the [transportation website](#).

**Writing Centers:**
The Graduate Writing Center at Teachers College and the Writing Program at Columbia University provide writing assistance to students.

SERVICE LEARNING OPPORTUNITIES

Service learning is one way for gaining cultural competence by applying clinical skills in an underserved patient population. The American Physical Therapy Association has pro bono services incorporated into
the Association's Code of Ethics. Students have the following service learning opportunities while matriculated at Columbia.

ELECTIVES:

One Week in Guatemala during Spring Semester Break or at the end of Summer I
Under the auspices of Dr. Martha Sliwinska or other faculty, and in coordination with the agency Sharing the Dream, students have an international experience with underserved communities in need of a broad range of health care services and education. Students use previously learned knowledge and skills as they apply to the needs assessed in the community for pro bono services. Health risks related to prevention are assessed and physical therapy services applicable to the needs will be designed and implemented. The Program collaborates with other non-profit organizations that work closely with Sharing the Dream. For example with, Transitions, where students participate in a wheelchair seating clinic. Students are responsible for the cost of the trip and run various fund-raising activities throughout the year to help subsidize the expense. More information about the work of the agency can be found at sharingthedream.org. A description of the elective is found under Course Descriptions, page 38.

OTHER OUTREACH OPPORTUNITIES (NOT ELECTIVES):

All these service activities take place within the Washington Heights community on or near the CUIMC campus.

Columbia Student Medical Outreach (CoSMO) is pro bono, interdisciplinary clinic run by CUIMC students from nursing, medicine, physical therapy, social work, and public health who provide healthcare services to the local underserved community in Washington Heights, NYC. Established in 2000, students at CoSMO work under the supervision of practicing healthcare professionals to provide primary medical care, health screens, diabetes management education, behavioral health, and physical therapy services to uninsured individuals who may not have regular access to health care. Columbia DPT students learn to evaluate and treat patients at CoSMO through mentorship from peers and licensed physical therapists. Visits occur 2-3 times per month on Thursdays or Saturdays during the school year.

Lion KEEN is a partnership between Columbia PT and KEEN (Kids Enjoy Exercise Now) New York. It is a student-led wellness and empowerment organization for children and teens with disabilities. Its purpose is to provide a judgement-free haven for youths aged 5-21 to socialize, engage in physical activity, and develop self-confidence while interacting with peers. It also unites the NYC community by gathering volunteers from New York Cares and provides a year-round service to the families that enroll through KEEN New York. Various seasonal programs—such as sports, arts and crafts, teen basketball, youth baseball, are held once a week. The program is free for all attendees, and they welcome donations of games and equipment.

Anatomy Academy is a CUDPT student-run outreach program aimed at combating childhood obesity and promoting healthy lifestyle choices while inspiring children to pursue higher education. Fifth graders in the Washington Heights community learn principles of anatomy, physiology, and nutrition through small group mentoring and hands on learning activities. The curriculum is taught though one hour sessions once a week for 6 weeks at a local public school.

The Lang Youth Medical Program recruits, interviews, and accepts 12-15 local sixth graders each year. During the 6-year stretch from 7th through 12th grade, these students study anatomy, disease pathology, prevention, and community and public health. They also participate in field trip activities and complete annual year-end projects. DPT students participate in the Lang Mentoring program by working one-on-one with the 12th grade students on the cumulative Lang Student Expo project. This project includes an oral presentation and poster reflecting on their 6 years in Lang and their future career interests. Duration: Five one-hour Saturday sessions in the spring semester
The Lang Tutoring program is held in the fall and spring, run by physical therapy and medical students. They participate in 1.5 hour sessions that take place about 6 times throughout each semester.

HEALTH AND WELLNESS

Student Health Services (SHS) at CUIMC is committed to advancing the health of each student and to promoting a healthy campus community through its goals of caring, healing, and educating. It provides a full range of primary care, mental health, and health promotion and wellness services, which focus on student needs. It seeks to deliver care that is compassionate, informed, confidential, and cost-effective.

Medical Services

SHS physicians, physician assistants, and nurses provide a full range services, which include:

- Occupational exposure, evaluation and treatment
- Women’s, men’s, transgender health services
- Mental health services
- Travel advice related to immunizations and medications
- Nutrition counseling
- Referral to specialists
- Ancillary services, including on-site laboratory service
- Limited on-site medications

All care within the SHS is completely confidential and would only be released with the student’s written consent.

Immunizations

SHS administers the public health screening and immunizations required by Columbia University Medical Center. The following are required before you will be allowed to register or attend classes:

- Positive titers indicating immunity to measles, mumps, and rubella. If any of these titers are negative or equivocal, another immunization with MMR is required.
- Immunity to varicella. If you have had chickenpox, a positive titer is required. If the titer is negative, varicella vaccine should be given. If you have not had chickenpox, two varicella immunizations at least 30 days apart are required.
- Record of three (3) Hepatitis B immunizations and a post-immunization titer indicating immunity.
- If the Hepatitis B post-immunization titer is not positive, Hepatitis B Surface antigen is required. If this titer is negative, a fourth dose of Hepatitis B vaccine should be given.
- A PPD skin test for tuberculosis or a QuantiFERON Gold blood test for tuberculosis within the past six (6) months. A chest x-ray is required if the PPD or QuantiFERON Gold is positive. BCG is not a contra indication to placing a PPD.
- A signed Receipt of Information regarding meningococcal vaccine is required.
- One adult dose of Tdap (Tetanus/Diphtheria/Acellular Pertussis) is required, with Td (Tetanus/Diphtheria) boosters every 10 years thereafter.
- Hepatitis C antibody with 6 months of program state date. If hepatitis C antibody is positive, a quantitative hepatitis C RNA test is required.
- Polio Vaccine
- Laboratory reports are required for all titers, antigens, and x-rays.

Center for Student Wellness

The Center for Student Wellness (CSW) is located at 107 Bard Hall. Their mission is to create innovative, research-based and student-centered opportunities that facilitate the personal and professional
development of CUIMC students. The CSW assists students in strategizing, prioritizing, troubleshooting, problem solving and developing an action plan targeted toward their individual concerns and stresses. CSW staff members have backgrounds in health promotion, health education, social work and public health. They are also trained in exercise science, human nutrition, health psychology, addiction and substance abuse, and complementary care. The CSW can assist students with a wide array of issues including:

- Alcohol and drug questions
- Anxiety and panic
- Career questions
- Concerns about a friend
- Depression
- Eating concerns
- Family issues and illness
- Fear of public speaking
- Interpersonal issues
- Nutrition questions
- Sexuality
- Sexual misconduct/abuse
- Sleep disturbance
- Study skill questions
- Text anxiety
- Time management skills

For more information on the CSW or to make an appointment, visit the student wellness website.

Additional, easily accessible, on-campus services include:

- Student Mental Health
- AIMS: Addiction Information and Management Strategies
- Sexual Violence Prevention and Response Program

Learn more about all services provided by Student Wellness.

DISABILITY SERVICES

Columbia University admits qualified students with disabilities. Campus facilities have been designed or modified to meet the needs of individuals with permanent or temporary disabling conditions. The Office of Disability Services (DS) coordinates services for students with disabilities in cooperation with the Program in Physical Therapy. The purpose is to address the individual disability needs of students while upholding academic integrity and standards of Columbia University.

DS facilitates equal access for students with disabilities by coordinating accommodations and support services. Disability Services works with students with all types of disabilities, including physical, learning, sensory, psychological, AD/HD and chronic medical conditions. Disability Services also provides assistance to students with temporary injuries and illnesses.

Accommodations are adjustments to policy, practice, and programs that level the playing field for students with disabilities and provide equal access to Columbia’s programs and activities. Examples of accommodations include the administration of exams, services such as note-taking, sign language interpreters, assistive technology and coordination of accessible housing needs. Accommodations are specific to the disability-related needs of each student and are determined according to documented needs.
and the student’s program requirements. Until the registration process is completed and approved by DS, students cannot receive reasonable accommodations.

Registration includes submission of both the DS Registration Form and disability documentation. The Registration Form and disability documentation guidelines are available online at http://health.columbia.edu/services/ODS and at the DS office (Bard Hall, Room 105). Students are encouraged to register within the first two weeks of the semester to ensure that reasonable accommodations can be made for that semester. Students may consult with program faculty member Dr. Wing Fu at wf2214@cumc.columbia.edu, who serves as the program liaison to DS. Learn more about the Office of Disability Services.

OFFICE OF SCHOLARLY RESOURCES
(Augustus C. Long Health Sciences Library)

Columbia University is home to over 28 libraries and archives, each of which is a resource for the physical therapy students. Students rely most heavily on the Augustus Long library of the Health Science Campus.

The Augustus Long library, located in the Hammer Health Sciences Center, serves the needs of faculty members, students and researchers in the various health science disciplines. The total number of physical volumes owned by the Health Sciences Library (HSL) is 365,781; 35,000 physical volumes are shelved on site at HSL, and 330,781 physical volumes are shelved in a remote storage facility. Faculty, students and staff have access to all. Plus, there are 157,074 unique monographic titles in all formats, and 5,300 serial titles in all formats. In addition to this, 24 databases (paid for, licensed or linked to for access by HSL) are available to all faculty, students and staff and accessible via any computer.

The media center houses a microcomputer laboratory, which offers a wide range of software to run on the microcomputers. A second Apple microcomputer laboratory is part of the new learning center. Laser printers and plotters are available. All students and faculty can use the microcomputer laboratories. In addition to the traditional reference sources, the library offers computerized MEDLARS. The library also provides CLIO, a computerized catalog for all materials added to Columbia University libraries since 1981. Students and faculty have access to a copy center that is also located in the Health Sciences Library. The library staff is readily available and consistently helpful to the students. Library hours are Monday through Thursday, 8:00 a.m. to 11 p.m.; Friday, 8 a.m. to 8 p.m.; Saturday, 10 a.m. to 11 p.m.; and Sunday, noon to 11 p.m. The Student Computer Rooms, the After Hours room, and the Lower Level Learning Center Computer Room are each available 24 hours a day, 7 days a week. As indicated, all the instructional aids are very adequate and readily accessible. View a complete guide to the University Libraries.

CUIMC INFORMATION TECHNOLOGY

CUIMC Information Technology provides computer services and resources to support education and research at the Health Sciences campus, including computer labs and classrooms, development and delivery of online curriculum and multimedia, assistance in connecting to and using the campus network, computer support for the Health Sciences Library, and development and administration of CPMCnet, the primary Internet and World Wide Web server and gateway of the Columbia Presbyterian Medical Center. See a complete list of services provided.

The Center is located on the second floor of the Health Sciences Library. Computer labs maintained by CUIMC IT are located in the Center and in a room adjacent to the lobby of the Hammer Building that is open twenty-four hours. A wide range of general applications, such as word processing, presentation graphics, and statistical analysis are supported on Windows and Macintosh computers in the labs. The Center also provides access to printing, electronic mail, and campus wide network resources. Assistance
with viruses, damaged files, and file conversion/transfer is provided at the Center’s service desk. An extensive workshop program provides hands-on training in computer applications, electronic mail, and Internet navigation. Further information is available at the service desk or online.

**CENTER FOR CURRICULUM EVALUATION AND FACULTY SUPPORT**

The Center for Curriculum Evaluation and Faculty Support assists course directors and faculty in the development and implementation of strong and innovative educational programs. Ongoing feedback from students about the courses, lectures and educational materials that make up the curriculum is a valuable component in efforts to ensure that programs are of the highest quality. Throughout the year, students may be asked to complete evaluation surveys, participate in formal discussion sessions to assess various aspects of the curriculum, and/or review new materials to support the curriculum. Student comments and suggestions are solicited regularly and are greatly appreciated.

**CAMPUS SAFETY AND SECURITY**

**(CU Department of Public Safety)**

The Vagelos College of Physicians and Surgeons makes every effort to ensure the security and safety of all its members. All Columbia University buildings on the CUIMC campus are under the direction of a centralized Columbia University Department of Public Safety. These buildings include all classroom space used by the program, the library and University owned housing. All Columbia University buildings are patrolled by CU security twenty-four hours per day.

The dangers of living in New York City, and especially near the Medical Center, are greatly exaggerated. Common sense and knowledge of how to safeguard yourself and your possessions provide a powerful defense against what hazards there are. The Columbia University Vagelos Medical Center administration offers a series of informal seminars on security that can help you acquire “street smarts,” and both campus security and the local police precinct are eager to provide advice or real assistance. Columbia has enlarged and improved its security service, with increased outdoor and on-street guards and a roving patrol car. There is a Vagelos Medical Center shuttle bus to take you to nearby housing, an escort service, and a shuttle bus to the Morningside Heights campus. The CUIMC Security Task Force, which meets regularly to examine security problems and initiate solutions, includes student members.

Columbia University prepares an annual security report which is available to all current and prospective employees and students. The report includes statistics for the three previous years concerning reported crimes that occurred on campus, in certain off campus buildings or property owned or controlled by Columbia University, and on public property within, or immediately adjacent to and accessible from, the campus. The report also includes institutional policies concerning campus security, such as policies concerning sexual assault, and other matters. [Access the report online](#) or contact the Director of Administration and Planning, Public Safety at 212-854-3815.

**Street Patrol**

The campus area from 168th Street to 173rd Street along Fort Washington and Haven Avenues is patrolled twenty-four hours a day.

**Escort Service**

Escort Service is available to students within the campus area (W. 165th to W. 179th Streets, Broadway to Haven Ave) by calling the Office of Public Safety 15 minutes prior to your need for an escort. An escort (either by foot patrol or vehicle) is available 24 hours a day.

**Computer Security**

- Laptop and PC recovery software available for free online through CUIT.
• Operation ID: property engraving is free; great for laptops, computers, etc. Once engraved, the item is registered with the NYPD and Columbia University Department of Public Safety.

Bike Theft
• Bike registration: free. Registered with the NYPD and Columbia University Department of Public Safety.

EQUAL EDUCATIONAL OPPORTUNITY AND STUDENT NONDISCRIMINATION POLICY

The University is committed to providing a learning environment free from unlawful discrimination and to fostering a nurturing and vibrant community founded upon the fundamental dignity and worth of all of its members. Consistent with this commitment and with applicable laws, it is the policy of the University not to tolerate unlawful discrimination in any form and to provide students who feel that they are victims of discrimination with mechanisms for seeking redress.

Columbia University does not discriminate against any person in the administration of its educational policies, admissions policies, scholarship and loan programs, and other University-administered programs or permit the harassment of any student or applicant on the basis of race, color, sex, gender, pregnancy, religion, creed, marital status, partnership status, age, sexual orientation, national origin, disability, military status, or any other legally protected status.

Nothing in this policy shall abridge academic freedom or the University’s educational mission. Prohibitions against discrimination and discriminatory harassment do not extend to statements or written materials that are relevant and appropriately related to the subject matter of courses.

STUDENT POLICIES AND PROCEDURES ON DISCRIMINATION, HARASSMENT, GENDER-BASED AND SEXUAL MISCONDUT AND CONSENSUAL ROMANTIC AND SEXUAL RELATIONSHIPS

Columbia University is committed to providing a learning, living, and working environment free from discrimination, harassment and gender-based and sexual misconduct. Consistent with this commitment and with applicable laws, the University does not tolerate discrimination, harassment or gender-based or sexual misconduct in any form and it provides students who believe that they have been subjected to conduct or behavior of this kind with mechanisms for seeking redress. All members of the University community are expected to adhere to the applicable policies, to cooperate with the procedures for responding to complaints of discrimination, harassment and gender-based and sexual misconduct, and to report conduct or behavior they believe to be in violation of these policies to the Office of Equal Opportunity and Affirmative Action or Student Services for Gender-Based and Sexual Misconduct. See Essential Policies for the Columbia Community.

Additionally, the University has a website containing important information about discrimination, harassment and gender-based misconduct at Columbia. This website, called “Sexual Respect,” provides information for students who wish to learn more about the important issues, policies and resources.

RULES OF UNIVERSITY CONDUCT

The Rules of University Conduct (Chapter XLI) of the Statutes of the University are University-wide and supersede all other rules of any school or division. Minor violations of the Rules of Conduct are referred to the normal disciplinary procedures of each school or division (“Dean’s Discipline”) and are clearly delineated in the program’s Student Handbook provided to each incoming class.
All University faculty, students and staff are responsible for compliance with the Rules of Conduct. Copies of the full text are available in *Essential Policies for the Columbia Community*. These policies include:

- Student Email Communication Policy
- CUIT Computer and Network Use Policy
- Social Security Number Reporting
- Policy on Access to Student Records (FERPA)
- University Regulations
- Policies on Alcohol and Drugs
- Student Policies and Procedures on Discrimination, Discriminatory Harassment and Sexual Harassment
- Gender-Based Misconduct Policies for Students
- University Event Policies
- Policy on Partisan Political Activity
- Campus Safety and Security
- Leave of Absence Policies (Voluntary Leave, Involuntary Leave, Military Leave)
- Essential Resources
- Additional Policy Sources
- Consumer Information
- Directory

**PROCESSING A COMPLAINT AGAINST THE PROGRAM**

A prospective student who is unhappy with his or her encounter with the Program in Physical Therapy is encouraged to file a complaint. Initially the complaint can be emailed to the Program Director, Dr. Debra Krasinski, at dck6@cumc.columbia.edu.

Other resources for filing a complaint are:

The [Compliance Hotline](mailto:) is the university’s conduit for filing a complaint.

The [Ombuds Office](mailto:) also offers a safe place to discuss your concerns.

Direct email to the program’s Department Chair, Dr. Joel Stein at js1165@cumc.columbia.edu or Dean, Vagelos College of Physicians & Surgeons, Dr. Lee Goldman at lgoldman@cumc.columbia.edu

The Commission on Accreditation in Physical Therapy Education can be reached at [accreditation@apta.org](mailto:accreditation@apta.org).

**CUIMC CAMPUS AND NEW YORK CITY**

The CUIMC campus is within easy reach of New York City’s myriad attractions. Lincoln Center for the Performing Arts, the theater district, Greenwich Village, Wall Street, a variety of museums—the Metropolitan Museum of Art, the Museum of Natural History, the Museum of Modern Art, to name a few. Fifth Avenue, Little Italy and Chinatown are all a brief trip away by bus or subway. Within a one-hour drive from campus are outstanding ski resorts, beaches, and camping and hiking grounds. Students may ski at Great Gorge, swim at the New Jersey Shore or Long Island’s many beaches, or picnic and hike at Bear Mountain State Park.

The prospect of living in New York City offers a special challenge to students. For the health professional, it has a unique patient population and the opportunity to learn about the problems of health.
care delivery in a variety of urban settings. As a cultural and artistic center, the city is unrivaled. Students acclimate quickly to the public transportation system and follow sensible precautions that minimize the problems of urban living. They move freely around the city to enjoy all the New York has to offer—unmatched sightseeing, wonderful entertainment, unique cultural opportunities, and unlimited educational resources.

**ACADEMIC CALENDAR**

The Physical Therapy program does not always follow the academic calendar of the College of Physicians and Surgeons or University. The program calendar below is the proposed calendar for the Class of 2021. The Program reserves the right to revise or amend it, in whole or in part, at any time.

**Academic Calendar 2019 – 2021**

**3-Year Calendar**

**Class of 2021**

**Year I, 2018-2019**

**FALL I: August 39 – December 21, 2018, 16 weeks including final exams**

- Wed.-Thur., August 29-30, Class of 2021 orientation
- Monday, September 3, Labor day, University Holiday
- Tuesday September 4, Fall semester classes commence
- Monday, September 10, Observance of Jewish holiday, Rosh Hashanah (program holiday)
- Wednesday, September 19, Observance of Jewish holiday, Yom Kippur (program holiday)
- Tuesday, November 6, election day (University holiday)
- Wed.-Fri., November 21-23, Thanksgiving holiday
- Monday, December 10, last day of classes
- Tuesday-Friday, December 11-21, final exam period
- Monday-Sunday, December 24-January 6, winter recess

**SPRING I, January 7-May 17, 2019, 18 weeks including spring recess and final exams**

- Monday, January 7, Spring semester classes commence
- Monday, January 21, Martin Luther King’s birthday (University holiday)
- Thursday-Friday, January 24-25, CSM, Washington, DC
- Monday, February 18, President’s Day, CUIMC Holiday
- Friday, March 8, End of first half of Spring semester
- Monday, March 11, Start of second half of Spring semester
- Monday-Friday, March 18-22, Spring recess, service learning opportunity
- Friday, April 19, Observance of Good Friday, program holiday
- TBA, March-April, White Coat Ceremony
- Monday, May 6, last day of classes
- Tuesday-Friday, May 7-17, final exam period
- Monday-Friday, May 20-24, program recess

**SUMMER I, May 27-July 19, 8 weeks including final exams**

- Monday, May 27, Memorial Day (University holiday)
- Tuesday, May 28, Summer semester classes commence
- Thursday, July 4, Fourth of July (University holiday)
- Friday, July 12, last day of classes
- Monday-Friday, July 15-19, Final exam period
Monday-Friday, July 22-August 23, program recess
TBA, July or August, service learning opportunity

Year II, 2019-2020

**FALL II: Part A Didactic: August 22-October 25, 2019, 9-week session including final exams**
**Part B: Clinical Education I, October 28-December 20, 2019, 8 weeks, full time**
- Monday, August 26, Fall semester classes commence
- Wednesday-Thursday, August 28-29, Class of 2022 orientation activities
- Monday, September 2, Labor Day (University holiday)
- Monday, September 30, Observance of Jewish holiday, Rosh Hashanah (Program holiday)
- Wednesday, October 9, Observance of Jewish holiday, Yom Kippur (Program holiday)
- Thursday, October 8, last day of classes
- Monday-Friday, October 25, final exam period
- Monday, October 28, Clinical Education I commences
- Friday, December 20, Clinical Education I ends
- Monday-Friday, December 23-January 3, Winter recess

**SPRING II: January 6-May 15, 2020, 19 weeks including spring recess and final exams**
- Monday, January 6, Spring semester classes commence
- Monday, January 21, Martin Luther King’s birthday (University holiday)
- Thursday-Friday, February 13-14, CSM, Denver, CO
- Monday, February 17, President’s Day (University holiday)
- Monday-Friday, March 16-20, Spring recess, service learning opportunity
- Friday, April 10, observance of Good Friday (program holiday)
- Monday, May 4, last day of classes
- Tuesday-Friday, May 5-15, final exam period
- Monday-Friday, May 18-22, program recess

**SUMMER II: Clinical Education II, May 25-July 3, 2020, 10 weeks full-time**
- Monday, May 25, Clinical Education II commences
- Friday, July 31, Clinical Education II ends
- Monday-Friday, August 3-21, Summer recess
- TBA, July or August, service learning opportunity

Year III, 2020-2021

**FALL III, August 24-December 18, 2020, 16 weeks including final exams**
- Monday, August 24, Fall semester classes commence
- Monday, September 7, Labor Day (University holiday)
- Monday, September 28, Observance of Jewish holiday of Yom Kippur (program holiday)
- Tuesday, November 3, Election Day (University holiday)
- Wednesday-Friday, November 25-27, Thanksgiving holiday
- Monday, December 7, last day of classes
- Tuesday-Friday, December 18-21, Final exam period (Note: Many courses have scheduled projects, presentations and other related activities in lieu of final exams)
- Monday-Friday, December 23-January 1, winter recess
SPRING III, 2021, Terminal Clinical Experience. Dates depend on clinical sites and whether internship is single or divided.
   Monday, January 4, clinical experience period commences
   Friday, May 14, clinical experience program formally ends
   Tuesday, May 18, Program convocation and awards ceremony
   Wednesday, May 19, University commencement
   Thursday-Friday, May 20-21, national licensure review course (optional)

Notes:
Calendar dates are subject to change
The program follows a modified university calendar
GETTING AROUND THE COLUMBIA UNIVERSITY IRVING MEDICAL CENTER

Thousands of people visit Columbia University Irving Medical Center each day to work, learn, and receive high-quality health care. Explore the many options on the Campus Map. The map can open up different layers and will show you residences, eating places and other resources around the Medical Center campus.

You will also find helpful information about parking, alternative transportation and directions, and accessible routes, buildings and venues.

VETERANS BENEFITS AND TRANSITION ACT OF 2018

In accordance with Title 38 US Code 3679 subsection (e), this school adopts the following additional provisions for any students using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill® (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while payment to the institution is pending from the VA. This school will not:

- Prevent nor delay the student’s enrollment;
- Assess a late penalty fee to the student;
- Require the student to secure alternative or additional funding;
- Deny the student access to any resources available to other students who have satisfied their tuition and fee bills to the institution, including but not limited to access to classes, libraries, or other institutional facilities.

However, to qualify for this provision, such students may be required to:

- Produce the Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies.