

# Physical Therapy

The three year Doctor of Physical Therapy Program is offered through the Russell Sage College School of Health Sciences. Physical therapists are health care professionals who provide services to patients and clients of all ages. Through a comprehensive process of examination, evaluation, diagnosis, prognosis, intervention and outcome assessment, physical therapists provide care to patients to alleviate impairments and functional limitations, disabilities, or changes in physical function and health status resulting from injury, disease, or other causes. Physical therapists also have an active role in consultation, education, critical inquiry, administration, and supervision of physical therapy services as well as provision of prevention and wellness services, including screening and health promotion. Physical therapists interact and practice in collaboration with a variety of professionals, including nurses, physicians, educators, social workers, occupational therapists, speech-language pathologists, audiologists, and dentists. Physical therapists work in a variety of practice settings, including hospitals; outpatient clinics; rehabilitation centers; skilled nursing, extended care or sub-acute facilities; home health; education or research centers; early intervention programs and preschool, primary and secondary schools; hospices; corporate health centers; industrial or other occupational environments; collegiate, amateur, and professional athletic facilities; fitness centers; and sports training facilities.

## DPT Mission and Philosophy

### Mission Statement

Consistent with the mission of the Sage Graduate School and the American Physical Therapy Association Vision 2020 statement, the Russell Sage College Doctor of Physical Therapy Program prepares physical therapists who are exemplary, autonomous practitioners. The depth and breadth of our professional curriculum is enriched by the intellectual community found at our comprehensive university that is dedicated to liberal, professional, and specialized programs of study. Graduates embrace their role in promoting the profession through evidence-based practice that is respectful and sensitive to individual differences, commitment to lifelong learning that sustains clinical excellence, and service to community and society.

### DPT Program Philosophy

The members of the Doctor of Physical Therapy Program believe:

1. In the inherent worth of the individual and the value of diversity.
2. Physical therapists are autonomous practitioners who are lifelong learners and engage in evidence-based practice. They are prepared to meet the demands of current and evolving practice by means that are consistent with the core values of professionalism in physical therapy.
3. Clinical excellence includes the highest possible professional, ethical, legal, and scientific standards.
4. Physical therapists need a broad base of preparation in liberal arts, professional theory, and critical inquiry integrated with practical and applied experiences.
5. Active hands-on learning experiences with patients/clients are essential throughout the curriculum to assist students in gaining cognitive, psychomotor, and affective skills to prepare them for clinical practice, and small class sizes enhance interactive learning.
6. The integration of mind, body, and spirit for self and others is essential to the delivery of safe, comprehensive, and effective physical therapy services.
7. Meeting the healthcare needs of patients/clients requires effective skills in communication, collaboration, and advocacy.
8. Effective healthcare delivery is sensitive to the cultural and financial needs of all patients/clients in order to empower them to be active in their own care.
9. Faculty members are models for students in their roles as educators, scholars, administrators, clinicians, consultants, and providers of professional and community service.
10. Faculty and students have a responsibility to make positive contributions to the professional community and community-at-large.

# Physical Therapy Curriculum

## Program Length

The typical three calendar year graduate program begins in the summer and includes seven academic semesters, with one summer internship, one fall-spring internship, and one spring internship. Students graduate in May following completion of the third year of the DPT program.

## Curriculum Model

The purpose of the Doctor of Physical Therapy Program at Russell Sage College is to provide a quality educational experience that prepares graduates for entry into the physical therapy profession in a manner that exemplifies standards of excellence. Our mission and philosophy along with our student goals form the foundation for the physical therapy curriculum. Graduates of the DPT Program will be competent to practice physical therapy at an entry level consistent with the APTA *Guide to Physical Therapy Practice: A Normative Model of Physical Therapist Professional Education*, and the APTA *Vision Statement for Physical Therapy 2020*. Patient/client centered care is at the core of the curriculum design, which is based on the disablement model and the patient/client management model. The curriculum emphasizes a problem-solving approach for clinical decision-making, critical thinking skills, collaboration, communication, interpersonal interactions, and clinical research applications.

The curriculum has been developed along six organizing elements with six transcurricular themes.

Organizing Elements	Transcurricular Themes
Musculoskeletal System	Safety
Neuromuscular System	Communication
Cardiovascular and Pulmonary System	Social Responsibility
Integumentary System	Ethical and Legal Behavior
Clinical Decision Making/Critical Inquiry	Evidence-Based Practice
Human Interaction	Life Long Learning

## Course Sequences

- [Physical Therapy: 3-Year Professional Course Sequence](#)

## Clinical Education

Clinical Education is an integral part of the curriculum. Students are prepared to successfully bridge academic preparation with clinical practice through the completion of full time and part time clinical education experiences. To participate in clinical education experiences, students must complete all academic requirements and also demonstrate effective interpersonal communication skills, judgment and professional behavior consistent with the APTA's *Professionalism in Physical Therapy: Core Values*. There may be additional expenses associated with the clinical education program including expenses for housing, meals, and daily commuting expenses to and from the clinical site. Some clinical facilities require a criminal background check on any student placed there for a clinical education experience. A felony conviction may affect a student's placement in clinical education settings or a graduate's ability to sit for the National Physical Therapy Examination or to attain state licensure.

## Licensure

Upon successful completion of the program, students are eligible to sit for the National Physical Therapy Examination and, after passing the exam, be licensed in any state.

## Student Goals

Upon completion of the physical therapy program, graduates will:

- Be autonomous practitioners able to practice in a safe and competent manner that reflects contemporary standards of practice.
- Demonstrate a commitment to professional growth.
- Demonstrate professionalism and act in a manner consistent with APTA's *Professionalism in Physical Therapy: Core Values*, and *Code of Ethics*.
- Demonstrate commitment to making a positive contribution to the profession and the community.

## Technical Standards for Physical Therapy Practice

In order to successfully complete the Doctor of Physical Therapy Program, applicants must be able to meet the technical requirements of the program. The technical standards for the Doctor of Physical Therapy Program include the ability to:

1. Acquire information from demonstrations and experiences in the basic and clinical sciences, including but not limited to, information conveyed through laboratory dissection, physiologic, and physical demonstrations.
2. Acquire information from written documents and interpret information presented in images from paper, videos, transparencies, and slides.
3. Accurately elicit from a patient or client a history and other pertinent information required to adequately and effectively assess and manage the patient or client's condition.
4. Select and perform examinations, including, but not limited to, assistive and adaptive devices; anthropometric characteristics; arousal and attention; aerobic capacity and endurance; community and work integration and reintegration; environmental, home and work barriers; gait, locomotion and balance; ergonomics and body mechanics; integumentary integrity; joint integrity and mobility; motor function, muscle performance, neuromotor development and sensory integration; pain; posture; prosthetic requirements; range of motion; reflex integrity; self-care capability; sensory integrity; ventilation, respiration, and circulation.
5. Use and interpret information from diagnostic maneuvers (observation, palpation, auscultation) in the course of conducting a comprehensive physical therapy examination.
6. Make clinical judgments based on the data obtained in a comprehensive examination and evaluation of the patient/client to determine a physical therapy diagnosis.
7. Synthesize information from the evaluation and other documented sources to formulate a plan of care.
8. Problem solve and think critically to judge which theory, and/or strategy of assessment and intervention is most appropriate for facilitating the attainment of the highest level of function for individual patients and clients.
9. Perform therapeutic interventions including, but not limited to, therapeutic exercise, patient or client related instruction, functional training, manual therapy, airway clearance, wound management, electrotherapeutic modalities, physical and mechanical modalities, and the prescription, application, and fabrication of assistive/supportive/protective devices.
10. Communicate effectively and efficiently with faculty, patients, clients, families, and all members of the health care team about a patient's condition.
11. Develop effective and appropriate relationships with patients, clients, colleagues, coworkers, and relevant others.
12. Practice in a safe manner at all times and respond appropriately to emergencies and urgencies.
13. Provide patient-related and client-related education and consultation to identify problems, recommend solutions or produce a specified outcome on behalf of a patient or client.
14. Impart information or skills, and instruct peers or other health care providers, in activities related to physical therapy.
15. Read and interpret professional literature in evaluating the efficacy of new and established interventions and technologies.
16. Demonstrate personal integrity that is essential to the practice of physical therapy.
17. Adapt and function effectively under the various circumstances and rigors which are inherent in the

clinical practice of physical therapy.

## Admission

Students may be admitted in one of two points of entry to the Doctor of Physical Therapy Program: direct entry through Sage Graduate School or through one of the 3+3 or 4+3 programs at Russell Sage College. The prerequisite courses must be completed prior to beginning the DPT Program.

## Prerequisite Courses for the DPT Program

	Credits
Anatomy and Physiology w/lab	8
Cell Biology/Microbiology or equivalent w/lab	4
Chemistry w/lab	8
General Physics w/lab	8
Introduction to Psychology	3
Human Development	3
Statistics	3

## Direct Entry through Sage Graduate School (SGS)

Qualified men and women who possess or are completing a bachelor's degree and have fulfilled the prerequisite courses for the DPT Program may be accepted directly to Sage Graduate School. All program admission requirements must be completed prior to starting the DPT program. In addition to meeting the general requirements for admission to Sage Graduate School, the successful applicant to the DPT Program will demonstrate evidence of the following:

- Earned bachelor's degree from an accredited college or university.
- Minimum cumulative grade point average (GPA) of 3.25.
- Minimum science GPA of 3.25 in the prerequisite science courses.
- Completion of all prerequisite courses (listed above) for the DPT Program with a minimum grade of "C" or better in each required course.
- No more than 3 previously passed (any grade other than "F" or "W") courses may be repeated throughout the undergraduate career. The grade of the second attempt will be the grade used in GPA calculations.
- Completion of at least 40 hours of physical therapy clinical observation under the supervision of a licensed physical therapist.
- Submission of the Academic and Technical Program Standards Statement
- Completion of the online application through the Physical Therapist Central Application Service (PTCAS).

## Articulation Agreements with 4-Year Colleges

Sage has developed articulation agreements with several four-year colleges for priority admission to the Sage Doctor of Physical Therapy Program for qualified students. These agreements provide for:

- Preferred acceptance into the DPT Program for students who have completed DPT Program course prerequisites, after initial advisement, with completed PTCAS application and evidence of academic eligibility;
- Waiver of Sage Graduate School application fee;
- Early acceptance (for students who submit applications prior to August 15 of their senior year); and,
- Advisement to coordinate undergraduate electives and coursework to address DPT Program prerequisites.

Qualified students will:

- Earn a bachelor's degree from an accredited college or university;
- Minimum cumulative grade point average (GPA) of 3.25;
- Minimum science GPA of 3.25 in the prerequisite science courses;
- Completion of all prerequisite courses (listed above) for the DPT Program with a minimum grade of "C" or better in each required course;
- No more than 3 previously passes (any grade other than "F" or "W") courses may be repeated throughout the undergraduate career. The grade of the second attempt will be the grade used in GPA calculations.
- Completion of at least 40 hours of physical therapy clinical observation under the supervision of a licensed physical therapist;
- Submission of the Academic and Technical Program Standards Statement
- Completion of the online application through the Physical Therapy Central Application Service (PTCAS).

For more information about the agreements, please visit the DPT Program web site.

## Entry through Russell Sage College (RSC)

Students who are entering directly from high school or transferring at the pre professional level may apply to Russell Sage College for either a typical 4+3 or an accelerated 3+3 bachelor's degree leading to the Doctor of Physical Therapy degree. Students entering either of these programs will choose an undergraduate major in one of the following disciplines: Applied Biology; Biology, English, Health Sciences, Interdisciplinary Studies, or Psychology.

Academic Requirements for Admission to the DPT Program from RSC:

- Earned bachelor's degree (4+3 students only).
- Completion of undergraduate major requirements and RSC general education courses (3+3 students only).
- Completion of all prerequisite courses for the Doctor of Physical Therapy Program with a grade of "C" or better in each required course.
- Minimum cumulative grade point average (GPA) of 3.25.
- Minimum science GPA of 3.25 in the required prerequisite science courses (BIO 201, 202, 220; CHM 103/104 or 111/112; and PHY 101/102 or 107/108).
- Completion of at least 40 hours of physical therapy clinical observation under the supervision of a licensed physical therapist beginning the professional program.
- Submission of the Supplemental Application Forms Packet (for students admitted directly from high school only)
- Application through PTCAS (transfer students only)
- Submission of the Academic and Technical Program Standards Statement (transfer students only)

## Typical 4+3 Program (Bachelor's and DPT)

Students who are admitted to the 4+3 program at Russell Sage College complete the bachelor's degree in four years. This program allows greater latitude for taking additional elective courses of interest to the student and may be more conducive for success. Students who meet the academic requirements are **guaranteed** admission to the Doctor of Physical Therapy Program at Sage Graduate School upon completion of the bachelor's degree. The bachelor's degree is awarded from Russell Sage College in the spring of the fourth year. The DPT degree is awarded from Sage Graduate School at the end of the seventh year. The first formal review for eligibility to progress into the professional program will occur after the fall semester of the fourth year at RSC or SCA.

## Accelerated 3+3 Program (Bachelor's and DPT)

Students who are admitted to the 3+3 bachelor's program at RSC are eligible to accelerate into the professional

Doctor of Physical Therapy Program in their fourth year. Students who have completed a minimum of 90 undergraduate credits and meet the academic requirements above are **guaranteed** admission to the DPT Program at Sage Graduate School. The bachelor's degree is awarded from Russell Sage College in December of the fourth year, and students participate in the spring commencement ceremony. The DPT degree is awarded from Sage Graduate School at the end of the sixth year. The first formal review for eligibility to continue into the professional program will take place after the fall semester of the third year at RSC.

## Procedures for Progression/Acceleration into the DPT Program

By the last day of class of the Fall Semester (fourth year for 4+3 program; third year for 3+3 program) students progressing from the 4+3 program or accelerating from 3+3 program into the DPT program must:

- Arrange for a meeting with the PT Program Faculty Advisor
- Complete PT program progression/acceleration packet (Academic and Program Standards Statement, Student Information Form, Clinical Observation Documentation Form) available on the Physical Therapy Department website;
- Submit a current resume;
- Submit one professional letter of recommendation from a Sage faculty member;
- Submit a career goals essay;
- Provide transcripts from all college institutions attended; and,
- Students who have transferred into RSC must apply through PTCAS.

## Academic and Program Standards

The Physical Therapy Program at Russell Sage College is a professional education program at the clinical doctorate degree level. Students enrolled in the program must demonstrate achievement in academic and clinical competencies necessary for the professional practice of physical therapy and meet academic standards consistent with graduate school criteria. Students must demonstrate effective professional behavior as detailed in the program's Standards of Professional Behavior.

### 1. **Grade Point Average (GPA)**

An overall grade point average of at least **3.0** must be maintained in the Physical Therapy Program. A semester GPA below 3.0 will result in probation for the following semester. If the semester GPA is below 3.0 for two consecutive semesters or a total of three semesters, the student will be subject to suspension from the program. A student must attain an overall GPA of 3.0 or better prior to enrolling in the clinical education courses.

### 2. **Passing Course Grades**

If a minimum grade of C- is not obtained in a course (P in a pass/fail course), the student will be suspended and the course must be repeated before continuing in the curriculum. A course may be repeated only once and the student must achieve a minimum grade of B- (or P in a pass/fail course) on the second attempt. The second time a student receives a grade less than a C- in any professional component course, the student will be dismissed from the program.

### 3. **Oral/Practical/Proficiency Exam Grades**

Each student is expected to pass every oral/practical/proficiency exam on the first attempt with a minimum passing grade of 80%. If unsuccessful, the student will be allowed one retake of the exam and the Program Director will be notified. If the student does not achieve the minimum passing grade of 80% on the retake, the student will receive a grade of F for that course and will be suspended from the program. The second occasion that a student needs to repeat an oral/practical /proficiency exam will result in a letter from the Program Director requiring the student to meet with the course faculty and advisor. On the third occasion the student will be placed on probation the following semester. On the fourth occasion the student will be suspended from the program.

### 4. **Retention and Dismissal**

#### a. **Probation**

A student who receives a grade of C+, C or C- in any course will be placed on probation for the next semester. Probation for two consecutive semesters will result in suspension.

Probation for a total of any three semesters will result in suspension. Violations of the Program's Standards of Professional Behavior or APTA Code of Ethics and Guide to Professional Conduct are also grounds for being placed on probation.

Probationary status may jeopardize eligibility to apply for the [PTY 769 Capstone Experience](#), participate in the clinical education lottery and/or apply for graduate assistant or teaching assistant positions.

b. **Suspension**

Suspension from the program will be for a one-year period of time. A program of remediation will occur during this time period. Since the program is a lock step curriculum, courses that were not successfully completed cannot be repeated until the following year. Repeated violations of the Program's Standards of Professional Behavior or APTA Code of Ethics and Guide to Professional Conduct are also grounds for suspension.

c. **Dismissal**

A student is subject to dismissal from the program for any of the following:

- Student receives a grade less than B- in four (4) courses\*;
- Student has two (2) suspensions;
- Student has three (3) probations;
- Student does not achieve a minimum grade of B- (or P in a pass/fail course) when repeating a course;
- Egregious conduct that violates professional and/or legal standards.

A student who is academically dismissed from Russell Sage College Physical Therapy Program may apply for readmission after a period of at least one year. A program of reassessment and review will be required during this period. Students having difficulty maintaining the academic standards may be required to enroll in an extended curriculum.

\*A grade in a lecture/lab course in which the same grade is given for both components of the course only counts as one (1) grade.

**In addition to these standards, students admitted to the program on a provisional basis are required to meet the conditions of acceptance stated on their program of study.**

## Grievance/Appeal Procedure

Students may appeal any decision regarding their grade or status in the program by following the procedures for grievance/appeals specified in the Sage Graduate School Catalog and the DPT Student Handbook. Students may appeal any suspension or dismissal decision following the appeal procedures in the DPT Student Handbook.

## New York State and Accrediting Agency Approval

The Doctor of Physical Therapy Program at Sage is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) of the American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314-1488, [www.apta.org](http://www.apta.org), (703) 684-APTA (2782) or (800) 999-APTA (2782). The program is also registered with the New York State Education Department, Education Building, Albany, New York 12234, (518) 474-3852.

## Grievance/Appeal Procedure

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Students may appeal any decision regarding their grade or status in the program by following the procedures for grievance/appeals specified in the Sage Graduate School Catalog. Students should first seek resolution

through the course instructor, program director and department chair before seeking resolution outside the program. In the event that a student wishes to appeal a grade, the student must submit in writing to the course instructor the reasons for requesting a change in grade. For grades on an exam or assignment, this request must be submitted within two weeks of the graded work being returned to the student. To appeal the final course grade, the request must be submitted within the first two weeks of the next academic semester that follows the semester in which the course was taken (eg. fall course grades must be appealed within the first two weeks of spring semester and spring course grades must be appealed within the first two weeks of the fall semester).

## Physical Therapy Degrees and Certificates

### Physical Therapy (DPT)

#### Physical Therapy: 3-Year Professional Course Sequence

**Program:** Physical Therapy

**Type:** D.P.T.

#### First Year — Summer

Item #	Title	Credits
PTY 502	Gross and Functional Human Anatomy	
PTY 504	Introduction to the Physical Therapy Profession	
PTY 505	Surface Anatomy	
PTY 506	Human Biomechanics	
PTY 521	Pathology	

#### First Year — Fall

Item #	Title	Credits
PTY 501	Neuroscience	
PTY 509	Patient/Client Management: Integumentary System	
PTY 522	Pathology II	
PTY 523	Physiological Principles of Exercise and Fitness Assessment	
PTY 615	Clinical Research Methods for Physical Therapists	

#### First Year — Spring

Item #	Title	Credits
PTY 503	Physical Therapy Interventions	
PTY 507	Patient/Client Management: Musculoskeletal System I	
PTY 520	Clinical Applications: Musculoskeletal System	
PTY 605	Neuropathology for Physical Therapists	
PTY 611	Motor Control Across the Lifespan: Theory & Application	



## Second Year — Summer

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
PTY 720	Administration, Leadership, & Business Management for Physical Therapists	
PTY 722	Educational Strategies for Physical Therapists	

## Second Year — Fall

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
PTY 612	Patient/Client Management: Musculoskeletal System II	
PTY 614	Psychosocial Aspects of Physical Therapist Practice	
PTY 616	Patient/Client Management: Adult Neuromuscular System	
PTY 618	Foundations of Physical Therapist Clinical Examinations	
PTY 620	Clinical Applications: Adult Neuromuscular System	
PTY 647	Analysis of Professional Literature in Physical Therapy	

## Second Year — Spring

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
PTY 610	Health, Culture and Society	
PTY 613	Patient/Client Management: Musculoskeletal System III	
PTY 617	Patient/Client Management: Pediatric Neuromuscular System	
PTY 625	Clinical Applications: Cardiovascular and Pulmonary Systems	
PTY 627	Patient/Client Management: Cardiovascular and Pulmonary Systems	

## Third Year — Summer

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
PTY 608	Clinical Education I	

## Third Year — Fall

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
PTY 721	Health Promotion and Wellness	
PTY 723	Medical Imaging for Physical Therapists	
PTY 724	Pharmacotherapeutics for Physical Therapists	
PTY 725	Differential Diagnosis for Physical Therapists	
	PTY 768 or PTY 769	3

## Third Year — Spring: Part 1

- November - February

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
PTY 718	Clinical Education II	

## Third Year — Spring: Part 2

February – May

- Completion of the Capstone Experience from the Fall Semester

Item #	Title	Credits
PTY 719	Clinical Education III	
PTY 768	Capstone Experience: Evidence-Based Practice and Case Report	
PTY 769	Capstone Experience: Faculty Mentored Research Project	
	<b>Total credits:</b>	<b>125</b>

## Physical Therapy Classes

### PTY 501: Neuroscience

4 lecture hours per week. This course addresses the neuroscience issues important to the practice of physical therapy. Lecture topics include the structure and function of the central nervous system, the neuron, somatosensory receptors, the study of sensory and motor systems, neuroplasticity, neurology of walking and reaching, the autonomic nervous system, the limbic system, and pain and consciousness. Students must be enrolled in PTY-501 Lab while taking this course. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-501 lab while taking this course.

**Program:** [Physical Therapy](#)

### PTY 502: Gross and Functional Human Anatomy

The study of human anatomy is undertaken through lectures, demonstrations, computer programs, and student participation in cadaver dissections. The course is presented on a regional basis, stressing the interrelationships of structure with function. Emphasis is put on the study of the musculoskeletal, cardiovascular, pulmonary and peripheral nervous systems. Students must be enrolled in PTY-502 Lab while taking this course. This course is only open to students enrolled in the entry level DPT Program. Students must be enrolled in PTY-502 Lab while taking this course.

**Program:** [Physical Therapy](#)

### PTY 503: Physical Therapy Interventions

In this course, students will learn and demonstrate the use of physical agents and interventions utilized in physical therapy practice across a variety of settings. The primary course content in both lecture and lab covers the underlying theory and use of physical agents, and interventions including bed mobility, gait training, transfers, wheelchair mobility, and massage. The integration of problem-solving skills and clinical decision making related to selection of appropriate physical agents and interventions as seen in current practice is discussed as well. Physical therapy practice in the acute care setting is introduced. Students must be enrolled in PTY 503 Lab while taking this course.

**Prerequisites:**

PTY 502 PTY 506

**Program:** [Physical Therapy](#)

### PTY 504: Introduction to the Physical Therapy Profession

This course introduces the student to the profession of physical therapy. The course explores such topics as the history of physical therapy, specialties in physical therapy, different practice settings, the role of various health professionals, collaboration, The Guide to Physical Therapist Practice, reimbursement, Core Values and

professional behavior, legal and ethical issues, cultural competence, communication, the APTA, and basic skills for professional writing and presentations. An online component familiarizes the student with physical therapy documentation. Included in the course is a self-study module in which the students learn common medical terminology. This course is only open to students enrolled in the entry level DPT Program.

**Program:** Physical Therapy

## PTY 505: Surface Anatomy

This Surface Anatomy course is designed to be a hands-on experience that allows the student to develop proficiency palpating bony and soft tissue structures. Emphasis will be placed on recognition, identification and palpation of human anatomical structures that are being studied in the Gross & Functional Anatomy course. Students will develop an awareness of the wide range of normal that exists in the population. Professional communication and interactive skills will also be emphasized. This course is only open to students enrolled in the entry level DPT Program. Students must be enrolled in PTY 502 Gross & Functional Anatomy while taking this course.

**Program:** Physical Therapy

## PTY 506: Human Biomechanics

Biomechanics is the application of the principles of physics and Newtonian mechanics to movement of the human body. Through lectures, laboratory demonstrations and experiences, and class projects, students will develop an understanding of and be able to analyze, apply, synthesize and evaluate the effects of physical properties and Newtonian mechanics on human movement and on the human body. The following content areas will be included: biomechanical principles and properties of biological material, kinematics, kinetics, as well as the application of biomechanical principles to functional activities. This course is only open to students enrolled in the entry level DPT Program. Students must be enrolled in PTY 506 Lab while taking this course.

**Program:** Physical Therapy

## PTY 507: Patient/Client Management: Musculoskeletal System I

In this course students are introduced to the patient with musculoskeletal system dysfunction across the lifespan. Topics include musculoskeletal examination and evaluation, manual techniques therapeutic exercise, principles of training, documentation, coding as well as discussion of specific musculoskeletal topics, such as fractures, joint replacements, pediatric orthopedics, arthritis management, and amputation management. Students will develop examination and manual skills including history, screening, posture assessment, orthopedic test and measures, joint mobilization and therapeutic exercise. The clinical decision making process and knowledge translation is introduced via the use of patient problems, case studies and student presentations.

### **Prerequisites:**

PTY-506, 502, 522, 523 This course is open only to students enrolled in entry level DPT program Students must be enrolled in PTY-520 , in PTY-507 Lab while taking this course

**Program:** Physical Therapy

## PTY 509: Patient/Client Management: Integumentary System

3 Lecture hours per week. This course will examine the causes and physiologic characteristics of a variety of wounds. Intervention and prevention strategies will be discussed in detail. Wound dressings and their function in relation to wound characteristics will be discussed. Students will develop decision-making skills for the use of various types of wound dressing materials. Physical Therapy technologies and modalities will be discussed in relation to the phases of wound healing and their ability to contribute to the expected outcomes. Students will practice the use of standard and universal precautions while performing sharp debridement techniques and dressing applications. Therapeutic positioning techniques and pressure management medical devices will

be used to achieve off-loading and wound prevention for a variety of client needs. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled PTY-519 and in PTY-509 Lab while taking this course.

**Prerequisites:**

PTY-521

**Program:** Physical Therapy

## PTY 519: Clinical Applications: Integumentary System

This part-time clinical education experience is concurrent with PTY 509 Integumentary System. This part time clinical education component gives the students an opportunity to observe examination, evaluation, goal setting, documentation and application of interventions for patients with integumentary dysfunction. Students are expected to practice in a safe, professional, ethical manner with adherence to legal practice standards including maintaining patient confidentiality in accordance with HIPAA guidelines. Students are responsible for their own transportation to and from the assigned clinical facility. This course is open only to students enrolled in entry level DPT program. Students must be enrolled in PTY-509 and PTY 509L while taking this course.

**Program:** Physical Therapy

## PTY 520: Clinical Applications: Musculoskeletal System

This part-time clinical education experience is concurrent with PTY 507 Musculoskeletal System I & PTY 503 Physical Therapy Interventions. This clinical education component gives the students an opportunity to apply their didactic material and to interact with patients in an orthopedic setting. Practice of examination, evaluation, goal setting, documentation and application of physical therapy interventions appropriate to the student's skill level are carried out under the supervision of a licensed physical therapist. Students are expected to practice in a safe, professional, ethical manner with adherence to legal practice standards. Students are responsible for their own transportation to and from the assigned clinical facility. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-507, PTY-507L, PTY 503 & PTY 503L, while taking this course.

**Program:** Physical Therapy

## PTY 521: Pathology

This course examines models of disease and illness; the impact of physical and social environments on health; the interaction between psychological and physical health; and general concepts of infection, inflammation, injury, oncology, and healing. Students learn about basic laboratory tests, fluid/electrolyte imbalances, acid/base imbalances, and standard precautions; and apply this information to specific pathologies. The course also explores the pathological changes across the life span inherent in the common disease processes in the following systems: immunologic, integumentary, reproductive, lymphatic, nervous system, psychological and renal/urologic. Students gain insight into the etiology, pathology, signs and symptoms, differential diagnosis, prognosis, medical/surgical management that can be applied to general physical therapy management and will develop a foundation for student decision making.

**Program:** Physical Therapy

## PTY 522: Pathology II

This course examines the impact of physical and social environments on human development of the fetus through the adolescent. This course also explores the pathological changes across the life span inherent in common disease processes in the following systems: cardiovascular, pulmonary, hematological, gastrointestinal, hepatic, musculoskeletal, and neuromuscular. Students gain insight into the etiology, pathology, signs and symptoms, differential diagnosis, prognosis, medical/surgical management that can be applied to general physical therapy management and will develop a foundation for student decision making.

**Program:** Physical Therapy

# PTY 523: Physiological Principles of Exercise and Fitness Assessment

Physiologic response and adaptation to physical activity across the lifespan is explored. Topics for study include physiological response of humans to aerobic, anaerobic, muscle strengthening, muscle endurance exercise, and the effects of thermal conditions and altitude on human performance. Nutrition and its effects on fitness/activity across the lifespan and the principles and procedures of fitness assessment are presented. Application of strengthening and cardiovascular training programs to physical therapy patients and clients is introduced. This course is only open to students in the DPT program.

**Prerequisites:**

PTY 502

PTY 505

ABA 501

PTY 506

**Program:** Physical Therapy

## PTY 600: Independent Study

to be arranged with faculty

**Program:** Physical Therapy

## PTY 605: Neuropathology for Physical Therapists

Neuropathology across the lifespan provides an overview of pathological conditions affecting the central and peripheral neurological system from birth through aging. Emphasis is placed on knowledge of pathology, medical management, recognition of clinical signs and symptoms as well as disease/disability relation to neuro-dysfunction. This course prepares students for their coursework in examination and intervention of adults and pediatric populations.

**Program:** Physical Therapy

## PTY 608: Clinical Education I

This full-time clinical education experience during the summer follows successful completion of the first year of the professional curriculum. This clinical education component gives the students an opportunity to apply their didactic material and to interact with patients in a general health care facility, hospital, skilled nursing facility or private practice. It is expected that the majority of patients encountered in the first clinical education component will be those who have orthopedic/musculoskeletal or integumentary impairments. Some patients with CNS and/or cardiopulmonary impairments as a primary diagnosis may be seen, but these should not be the major caseload for student at this level. Practice of examination, goal setting, documentation and application of physical therapy interventions appropriate to the student's skill level are carried out under the supervision of a licensed physical therapist. Students are expected to practice in a safe, professional, and ethical manner with adherence to legal practice standards. This course is open only to students enrolled in the entry level DPT program.

**Prerequisites:**

PTY 503, 507, 509,611

**Program:** Physical Therapy

## PTY 610: Health, Culture and Society

2 Lecture hours per week. The purpose of this course is to explore the relationship between culture and health and the implications for physical therapy practice. Disease, illness, curing and healing will be explored as culture constructions. Discussion will center on the impact of gender, age, race, ethnicity, socio-economic

status, sexuality and disability on health and illness. Through a better understanding of cultural variability and cultural uniqueness students will learn to become more effective in their communications with patients. This course is open only to students enrolled in the entry level DPT program.

**Program:** Physical Therapy

## PTY 611: Motor Control Across the Lifespan: Theory & Application

This course will provide the student with an in depth exploration of current theories of CNS development, pathology and recovery. Topics will include current research on motor control, motor learning and motor development with specific theoretical models for recovery from a neuromuscular pathology perspective through the lifespan. Practical application of techniques and problem-solving situations will be provided in the laboratory sections to further illustrate clinical relevance.

**Prerequisites:**

PTY 501

**Program:** Physical Therapy

## PTY 612: Patient/Client Management: Musculoskeletal System II

This course assists students in formulating an evidence based approach to examination, evaluation and intervention of the cervical and thoracic spine, rib cage and upper quarter using clinical decision-making models. Students build upon their observational and clinical skills necessary for evaluation and formulation of intervention programs. Practical application of techniques and problem-solving situations are provided in the laboratory sections to further illustrate clinical relevance. In addition to ergonomic assessment, advanced joint and soft tissue manual skills, inclusive of high velocity, low amplitude mobilization techniques, students are exposed to strategies associated with clinical practice, including, but not limited to, methods of service delivery and delegation of responsibilities to support staff.

**Prerequisites:**

PTY-507, 503

**Program:** Physical Therapy

## PTY 613: Patient/Client Management: Musculoskeletal System III

This course assists students in formulating an evidence based approach to examination, evaluation and intervention of the lumbo sacral spine, pelvic floor dysfunction, and the lower quarter using clinical decision-making models. Students build upon their observational and clinical skills necessary for evaluation and formulation of intervention programs. Practical application of techniques and problem-solving situations are provided in the laboratory sections to further illustrate clinical relevance. In addition to advanced joint and soft tissue manual skills, inclusive of high velocity, low amplitude mobilization techniques, students are exposed to strategies associated with clinical practice, including, but not limited to, methods of service delivery and delegation of responsibilities to support staff.

**Prerequisites:**

PTY-612

**Program:** Physical Therapy

## PTY 614: Psychosocial Aspects of Physical Therapist Practice

This seminar assists students to develop and practice effective therapeutic relationship skills useful in today's challenging health care environment. Students synthesize their part-time clinical education and personal experience with course content to strengthen existing styles and add new ones to their professional skill set.

Through discussion and interactive learning methods, students become more personally aware of themselves, the roles they are expected to play, the psychosocial aspects of physical therapy practice and how personal characteristics, experiences and mindsets influence the professional therapeutic interaction. These may affect the professional/clinician professional behavior, clinical decision making and treatment outcomes. Topics include: reflective practice, methods for effective stress management, values/beliefs as a foundation for cultural competence, facilitating health behavior change, moral/ethical decision making, collaborating for success, effective communication, providing compassionate care for people dealing with chronic conditions, changes in sexual functioning, multiple losses, death, and the grief process. The class contains opportunities for students to apply seminar concepts through case scenarios, guided small group and whole class discussion, video analysis, in class writing, role-plays and interviews with faculty and patients/guests.

**Program:** Physical Therapy

## PTY 614L: Psychosocial Aspects of Physical Therapist Practice Lab

This course assists students to develop and practice effective therapeutic relationship skills useful in today's challenging health care environment. Topics include: reflective practice, methods for effective stress management, values/beliefs as a foundation for cultural competence, facilitating health behavior change, moral/ethical decision making, collaborating for success, effective communication and providing compassionate care for people dealing with chronic conditions, changes in sexual functioning, multiple losses, death and the grief process.

This seminar course assists students to develop and practice effective therapeutic relationship skills useful in today's challenging health care environment. Topics include: reflective practice, methods for effective stress management, values/beliefs as a foundation for cultural competence, facilitating health behavior change, moral/ethical decision making, collaborating for success, effective communication and providing compassionate care for people dealing with chronic conditions, changes in sexual functioning, multiple losses, death and the grief process.

**Program:** Physical Therapy

## PTY 615: Clinical Research Methods for Physical Therapists

3 lecture hours per week. This course introduces students to clinical research methods and designs. Experimental, nonexperimental and qualitative research will be explored in relation to physical therapy practice. Topics include searching the literature, research ethics, and common statistical techniques and methods. Students will read, analyze and critique current literature in physical therapy and related disciplines. This course is only open to students in the entry level or Transition DPT programs.

**Program:** Physical Therapy

## PTY 616: Patient/Client Management: Adult Neuromuscular System

4 lecture hours per week. This course is designed to provide a comprehensive and systematic learning environment for students to develop basic skills, competencies, and understanding of the evaluation and treatment of adults with neurological impairments. The principles and purpose of evaluation as a basis for treatment planning is re-emphasized, along with the planning of comprehensive intervention programs for patients as well as their families. Philosophical approaches such as NDT and motor relearning program will be presented, but the major treatment focus will be the integration of these approaches with an emphasis on motor learning and relearning. Specific neurological dysfunctions to be discussed include CVA, TBI, MS, Parkinson Disease, cerebella dysfunction, brain tumors, spinal cord injury, and adults with developmental disabilities. Diagnostic procedures will be presented along with other topics such as pharmacology, respiration, wheelchair positioning and orthotics. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-620 and PTY-616 Lab while taking this course.

**Prerequisites:**

PTY-611

**Program:** Physical Therapy

## PTY 617: Patient/Client Management: Pediatric Neuromuscular System

3 Lecture hours per week. The focus of this course is examination, evaluation and intervention and outcome assessment for children with neuromuscular impairments. Students develop appropriate observation and clinical skills necessary for completing a comprehensive evaluation and formulating a plan of care that considers relevant developmental, social, economic and cultural factors. Students will apply models of clinical decision making that include evidenced-based practice. Lecture topics will emphasize the elements of the patient and client management model for pediatric patients with neuromuscular impairments. This course is only open to students enrolled in the entry level DPT Program. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-617 Lab while taking this course.

**Prerequisites:**

PTY 611 lecture , lab

**Program:** Physical Therapy

## PTY 618: Foundations of Physical Therapist Clinical Examinations

This course develops the skills of interviewing and clinical screening as the basis of physical therapist examinations. The fundamental examination skills as they apply to all practice settings and patient or client populations are introduced. The course is only open to students enrolled in the DPT program.

**Program:** Physical Therapy

## PTY 620: Clinical Applications: Adult Neuromuscular System

This part-time clinical education experience is concurrent with PTY 616 Adult Neuromuscular System. This part time clinical education component gives the students an opportunity to apply their didactic material and to interact with patients in a nursing home, rehabilitation center or hospital. Practice of examination, evaluation, goal setting, documentation and application of physical therapy interventions appropriate to the student's skill level are carried out under the supervision of a licensed physical therapist. Students are expected to practice in a safe, professional, ethical manner with adherence to legal practice standards. Students are responsible for their own transportation to and from the assigned clinical facility. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-616 and PTY-616 Lab

**Program:** Physical Therapy

## PTY 625: Clinical Applications: Cardiovascular and Pulmonary Systems

This part-time clinical education experience is concurrent with PTY 627 Cardiovascular & Pulmonary Systems. This part time clinical education component gives the students an opportunity to apply their didactic material and to interact with patients in a general health care facility, or hospital. Practice of examination, evaluation, goal setting, documentation and application of physical therapy interventions appropriate to the student's skill level are carried out under the supervision of a licensed physical therapist. Students are expected to practice in a safe, professional, ethical manner with adherence to legal practice standards. Students are responsible for their own transportation to and from the assigned clinical facility. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-627 and PTY-627 Lab.

**Program:** Physical Therapy



# PTY 627: Patient/Client Management: Cardiovascular and Pulmonary Systems

3 Lecture hours per week. This course is designed to enhance the knowledge and skills of the student in the care of patients with cardiovascular and/or pulmonary impairments. It will expose students to information and techniques necessary for patient evaluation, development of intervention care plans and appropriate goals for the desired outcomes identified, for a variety of cardiovascular and pulmonary impairments and diseases. This course is open only to students enrolled in the entry level DPT program. Students must be enrolled in PTY-625 and PTY-627 Lab while taking this course.

**Prerequisites:**

PTY 521 & 522

**Program:** Physical Therapy

# PTY 647: Analysis of Professional Literature in Physical Therapy

3 lecture hours per week. This course expands on the concepts related to critical inquiry introduced in PTY 615. The emphasis is on evidence-based practice and critically reading the scientific literature. Students read and discuss various types of research articles including randomized controlled trials, cohort and case control studies, case reports, single subject designs, systematic reviews and clinical practice guidelines. Students learn how to ask clinical questions and which types of articles can best answer the questions. Use of various evidence-based practice tools is also included as well as analysis of diagnostic tests. This course is only open to students in the entry level or Transition DPT programs.

**Prerequisites:**

PTY-615

**Program:** Physical Therapy

# PTY 718: Clinical Education II

This full-time 12-week clinical education experience follows successful completion of the second full year of the professional curriculum. This clinical education component gives the students an opportunity to apply their didactic material and to interact with patients in a therapeutic setting. It is expected that the majority of patients encountered in this clinical experience will be those who have orthopedic, musculoskeletal/ sports, cardiopulmonary, integumentary, and/or neuromuscular impairments, since students have fully completed those areas of the academic curriculum. Students will begin to integrate the five elements of patient/client management (as outlined in the Guide to Physical Therapist Practice)- examination, evaluation, diagnosis, prognosis, and intervention under the supervision of a licensed physical therapist. Successful completion of this clinical education component is a requirement for completion of the physical therapy curriculum. This course is open only to students enrolled in the entry level DPT program.

**Prerequisites:**

PTY-608

**Program:** Physical Therapy

# PTY 719: Clinical Education III

This full-time 12-week clinical education experience is the final clinical experience. This clinical education experience gives the students an opportunity to apply their didactic material and to interact with patients in a therapeutic setting. It is expected that the majority of patients encountered in this clinical experience will be those who have orthopedic, musculoskeletal/sports, cardiopulmonary, integumentary, and/or neuromuscular impairments, since students have fully completed those areas of the academic curriculum. At the completion of this experience students will be able to integrate the five elements of patient/client management (as outlined in the Guide to Physical Therapy Practice) -examination, evaluation, diagnosis, prognosis, and

intervention under the supervision of a licensed physical therapist. Successful completion of this clinical education component is a requirement for completion of the physical therapy curriculum. This course is open only to students enrolled in the entry level DPT program.

**Prerequisites:**

PTY-608

**Program:** Physical Therapy

## PTY 720: Administration, Leadership, & Business Management for Physical Therapists

This course enhances the students' knowledge and critical thinking skills in leadership, administration, management, and professionalism (LAMP) for autonomous physical therapy practice by providing students with an understanding of management and organizational behavior theories, health care business principles, and supervisory and advocacy skills. In the context of autonomous physical therapy practice, LAMP skills are applied to develop a physical therapy business and facility. The course is only open to students enrolled in the DPT program.

**Program:** Physical Therapy

## PTY 721: Health Promotion and Wellness

This course focuses on the role of the physical therapist in the design of health promotion and wellness programs for healthy, at risk and special populations across the lifespan. Theories of wellness, prevention, and health promotion; effect of nutrition, lifestyle, and the environment of wellness; and current initiatives are addressed. This course is open only to students enrolled in the entry level DPT program.

**Program:** Physical Therapy

## PTY 722: Educational Strategies for Physical Therapists

This course provides an understanding of the educational roles and responsibilities of the physical therapist in professional practice. Classroom assessment tools are frequently used to realize the value of assessment in the teaching and learning process. The importance of the physical therapist's role as educator is examined and verified in a variety of practice situations. This course is open only to students enrolled in the entry level DPT program.

**Program:** Physical Therapy

## PTY 723: Medical Imaging for Physical Therapists

In a doctoring profession a critical understanding of medical imaging and its use in differential diagnosis is necessary. This course will focus on: developing an understanding of the basic physics of medical imaging modalities, the medical indications of the particular medical imaging modalities, the specific imaging techniques, developing basic skills in the interpretation of medical images, the implications for physical therapy practice. Specific imaging techniques will include: Radiography, Fluoroscopy, CT Scan, MRI, Nuclear Medicine, and Sonography. This course will be image intensive, i.e. the student will be expected to spend a significant amount of time viewing images.

**Credits:** 1

**Program:** Physical Therapy

## PTY 724: Pharmacotherapeutics for Physical Therapists

This course is designed to enhance the student's knowledge and critical thinking skills in the foundational principles of pharmacology. This will include an understanding of the pharmacotherapeutics, pharmacokinetics, and pharmacodynamic properties of common drug classifications. Factors affecting pharmacokinetics such as

age, gender, body composition, disease, other drugs, nutrition and hydration will be discussed. Dose-response relationships, administration routes, absorption and distribution, biotransformation and excretion, potential activities/techniques and the physiological aspects of substance abuse will also be presented. Students will explore current trends and factors in pharmacological issues relevant to socioeconomic, cultural, legal and psychological issues.

**Program:** Physical Therapy

## PTY 725: Differential Diagnosis for Physical Therapists

This course enhances student knowledge of and critical thinking skills in the process of differential diagnosis related to the physical therapy profession through an exploration of the physical therapist's role as an independent practitioner working within the collaborative medical model. Topics include medical screening, referral, medical conditions that warrant urgent or immediate communication with a physician, systemic processes that mimic musculoskeletal impairments, and effective communication strategies with physicians and patients. This course is only open to students in the DPT program.

**Program:** Physical Therapy

## PTY 768: Capstone Experience: Evidence-Based Practice and Case Report

This course is one of the culminating courses of the physical therapy research sequence. Under faculty supervision students will continue to use the principles of evidence based practice and complete a clinical case report. Students will thoroughly search and analyze the research literature and apply their findings to clinical decision making. Students will present their case report at the Graduate Research Symposium.

**Prerequisites:**

PTY 647

**Program:** Physical Therapy

## PTY 769: Capstone Experience: Faculty Mentored Research Project

3 Lecture hours per week. This course is one of the culminating courses of the physical therapy research sequence. Students will be invited to complete a faculty mentored research project. Students will prepare a proposal, collect and analyze data, interpret results and prepare the written manuscript. Students will present the results of this project at the Sage Graduate School symposium.

**Prerequisites:**

PTY-647

**Program:** Physical Therapy