

Graduate Course Bulletin

2018 - 2019

Division of Physical Therapy

Emory University School of Medicine

Program Information

Program Interim Director: M. Johanson

Professors

E. Field-Fote, B. Greenfield, M. Johanson, L. Ting, S. Wolf

Associate Professors

B. Davis, S. Blanton, P. Bridges, T. Phillips, S. Pullen

Assistant Professors

K.L. Bishop, M. Borich, S. Caston, K. Geist, T. Kesar, M. Lyle, S. Krishnan, P. Nichols, T. J. Nocera, S. Penna, Phillips, B. Rogozinski, D. Shah, J. Sharp, P. Sprague, L. Zajac-Cox

Instructors

R. Nyberg, M. Wooden

Senior Associate

D. Spencer

Degree and Program Offerings and Requirements

Doctor of Physical Therapy Program

The Doctor of Physical Therapy (DPT) degree program is a component of the Division of Physical Therapy, Department of Rehabilitation Medicine. A professional, physical therapy curriculum was offered first by the Division of Physical Therapy in 1975 as a post baccalaureate certificate program and then changed to a professional level, master of physical therapy degree program in 1983 and to the doctor of physical therapy degree in 2001. The Division of Physical Therapy includes educational, research, and clinical programs. The mission of the division is presented below with objectives and curriculum information for the doctor of physical therapy degree program.

The Mission

The mission of the Division of Physical Therapy is to cultivate well-being of individuals and global communities through exemplary leadership in physical therapy education, discovery, and service.

The Doctor of Physical Therapy degree program is designed to:

1. Provide study and competence in promoting optimal human movement and function based on the biological, behavioral, physical, and medical sciences, including:

- a. Understanding and applying concepts and principles of movement science.
 - b. Using critical thinking and problem solving in planning, implementing, and assessing both clinical and scientific practices.
2. Prepare proactive leaders in the multifaceted roles of clinician, educator, researcher, administrator, and consultant in individual, group, and community contexts.
 3. Model and instill the values that promote professionalism and caring.
 4. Facilitate student commitment to independent thinking and lifelong learning and to student realization of the intrinsic rewards of these attributes.

Students obtain basic competencies essential for physical therapy practice and for developing leadership skills within the profession. In addition, students in the DPT program conduct a research project and study in advanced specialized areas.

The practical application of physical therapy skills is based on a concept of health care with three major characteristics. First, the welfare of the client is the basis of health care. Second, health care is dynamic, and changes are constantly being made to incorporate advances in methods and in delivery in care. The scope of health care today includes the promotion of health and an emphasis on the rights and responsibilities of clients. Third, the quality of health care is dependent on the process of delivery of service in the health care system and the extent to which individual needs of the patient/client are met. Optimal functional movement is the goal of physical therapy.

Students develop competencies in the professional program using the problem-solving process to demonstrate expertise in applying a theoretical framework of basic, behavioral, social, and medical sciences as the basis for his/her practice of physical therapy. Competency is demonstrated by:

- 1.. Using the interpersonal communication process with patients, healthcare providers and staff; including an active recognition of the rights and dignity of the individual in planning and administering programs of care.
- 2.. Using the teaching-learning process in interactions with patients, healthcare providers and staff.
- 3.. Examining and evaluating patients, and establishing an appropriate plan of care.
4. Providing appropriate therapeutic services.
5. Participating in the administrative responsibilities of a clinical physical therapist.

6. Using the basic principles of research in the critical analysis of concepts and findings generated by self and others.
7. Consulting with others in providing comprehensive care.

The educational program promotes attainment of the foregoing competencies in the following ways. First, the problem-solving approach is incorporated throughout the curriculum and used to identify and affect the needs of the client and the health care system. The physical therapist identifies and resolves health care problems through program planning that relates to an individual client, a specialty area, and the total health care system. This problem solving requires consideration of the theoretical framework of the basic, medical, and psychosocial sciences, in addition to use of process skills relating to the practice of physical therapy. In each of the above contexts, the physical therapist identifies a need and alternative program plans for meeting that need, selects the most appropriate plan, implements the plan, and then evaluates and modifies the plan as necessary. The client, the physical therapist, other health professionals and the health care system all are involved and must be considered in solving specific movement problems.

Second, interpersonal communications, including an active recognition of the rights and dignity of the client, is emphasized in all aspects of the program. Study and practice in reflective listening occurs initially. Then these concepts and skills are applied throughout all classroom and clinical experiences. Opportunities to practice interpersonal skills with patients from multiple cultures are embedded throughout the curriculum.

Third, the teaching/learning process is demonstrated and applied in all contexts, especially patient and colleague education. Also, the learning process is presented as it applies to the student's own learning, both during and after completion of the program. Continued learning is stressed as essential to professional development and evidence-based practice.

Fourth, the area of expertise of the physical therapist is the movement function or dysfunction of patients/clients and/or the use of therapeutic approaches to beneficially affect function. Generally, physical therapists are specialists in motor behavior, including the neuromusculoskeletal, pulmonary and cardiovascular, and cognitive systems. Basic content areas, which provide theoretical basis in the medical sciences, are:

- 1) Human growth and development,
- 2) Normal structure and function,
- 3) Disturbances in homeostasis as manifested by various pathophysiology,

- 4) Related medical and physical therapy management,
- 5) Ethics, professionalism and health services management.

Knowledge and skills in these areas are naturally sequenced, i.e., birth to aging, function to dysfunction, and general to specific. Organization of information related to the medical and clinical sciences is based on the homeostatic model and clinical problems presented by the patient/client as a result of disturbance of homeostasis. Accordingly, content is organized by clusters of clinical problems rather than by medical discipline or physical therapy technique. Also, integration of knowledge from the past, to present, to future is stressed. Learning of specific content areas is integrated, i.e., each content area with others, classroom experiences with clinical experiences, and content areas with the process skills.

Fifth, the scientific inquiry process is applied in evidence-based practice and clinical research. Evidence-based practice underlies the clinical courses. Working in small groups with a faculty mentor, students complete an original research project.

Finally, in addition to skills discussed above, administration, and consultation are observed and practiced by the student in both the clinic and the classroom. The problem solving, teaching-learning, and interpersonal processes are used as the student masters concepts and strategies associated with each area. Also, the student plans, implements, and evaluates a project that is designed to meet the need of a specific administrative or consultative agenda or clinical or community setting.

The doctor of physical therapy degree curriculum is approved and accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). CAPTE is an accrediting agency that is nationally recognized by the US Department of Education (USDE) and the Council for Higher Education Accreditation (CHEA). <http://www.capteonline.org>. Graduates are eligible to take the licensing examination required for the practice of physical therapy.

Admission Policies and Practices

Admission Requirements

Admission requirements are reviewed and revised annually. Applicants should verify current requirements with the Division of Physical Therapy and should be sure to use the current application materials. The following requirements must be satisfied for admission:

1. Applicants must hold a baccalaureate degree from an accredited college or university at the time of matriculation.
2. Applicants must submit the following to the Physical Therapist Centralized Application Service (PTCAS): official transcripts from all institutions of higher education attended; a completed application form; Graduate Record Examination (GRE) scores (institutional code 0102); three essays addressing the following topic/questions (a) Autobiography (b) Why do you want to attend Emory University School of Medicine for your Doctor of Physical Therapy Degree? (c) What makes you a good fit for the Emory DPT Program; recommendation forms completed by three referees, which should include a physical therapist familiar with the applicant's suitability for the profession and a current or former faculty member, and hours of experience in physical therapist patient settings. A minimum Grade Point Average (3.0 on a 4.0 point system) is required. The required GRE scores include: the verbal test score, the quantitative test score and the analytical writing test score. A minimum of 297 points is required for a composite verbal and quantitative score and a minimum of 3.0 is required for the analytical writing score.
3. Applicants must have successfully completed a four-semester-hour equivalent course in anatomy within five years of matriculation. The anatomy course must include a lecture component on human anatomy and a laboratory requiring either dissection of mammalian specimens or study of prosected mammalian specimens. Required topics include structures of the following systems: musculoskeletal, respiratory, cardiovascular, and the peripheral nervous systems. Also, study of the gastrointestinal system is recommended.
4. Applicants must have successfully completed a four-semester-hour equivalent course in human or mammalian physiology within five years of matriculation. The physiology course must be accompanied by laboratory studies. If a laboratory is not offered with the physiology course, a biology laboratory may substitute for the laboratory requirement, providing the biology laboratory includes the appropriate content. The physiology course or the biology laboratory course should cover all the following topics, although four of the five are acceptable: cell structure and function; cardiovascular, respiratory and digestive function; excretory function; and reproduction and development.
5. Applicants must have successfully completed a three-semester hour equivalent course in statistics within five years of matriculation. The course(s) should cover nonparametric and parametric statistics, including both analysis of covariance and multivariate analysis of variance. Use of statistical techniques with data sets, interpretation of statistical results, and computer interaction in data analysis are required.

6. Applicants must have successfully completed a four-semester hour equivalent course in physics I and a four-semester hour equivalent course in physics II within five years of matriculation. The course(s) should include a laboratory and should cover mechanics, sound, light, wave motion, heat, electricity, magnetism, and nuclear physics. The course does not have to be calculus-based. Enrollment in more than one physics course may be necessary to obtain the above content.

7. Applicant must submit a supplemental application to the Division of Physical Therapy.

8. Applicants must have experience using the following computer applications: word processing, communications, database, and statistics. Experience may be gained through formal computer courses or practical experience with the above applications.

9. Applicants in the final stage of admission screening are asked to have a formal interview.

10. Preference is given to applicants with practical experience in physical therapy and health care, which is supervised by a physical therapist. Such experience may be in a variety of service settings and should be of sufficient length to have given the applicant exposure to various problems encountered by persons with illness or activity/participation limitations.

11. Preference is given to applicants showing academic achievement in the biological, physical, and social sciences; courses should be above the introductory level and may have been taken at the baccalaureate or post-baccalaureate level. The student should seek academic preparation that assists in developing skills necessary to integrate problem-solving with the study of sciences, provides knowledge necessary to succeed in science courses within the professional curriculum, and promotes an understanding of human interactions, specifically those interactions with persons with illness or disability. Courses that could satisfy completion of emphasis areas may include, but are not limited to, biological science (vertebrate anatomy, physiology, biology, zoology, microbiology, genetics, embryology); physical science (chemistry, physics, mathematics); and social science (psychology, sociology, anthropology, philosophy).

12. Applicants are evaluated for selection on the basis of probable academic success in the curriculum; experience in and knowledge of the profession of physical therapy; and personal attributes such as commitment, maturity, and effective interaction with people.

13. Applicants must be approved by the Admissions Committee and Faculty.

14. Compliance with the Technical Standards of the Division of Physical Therapy is required.
15. Enrollment is limited and competitive; all qualified applicants may not be admitted. The application deadline is 11:59 pm October 15, 2018.

Admission, Regulations and General Requirements

An applicant's registration and class attendance are considered his or her agreement to comply with University rules and regulations as published in the manuals and other official publications, including amendments and revisions made during the student's continued enrollment.

Application

Admissions contact information and supplemental application:

The Physical Therapist Centralized Application Service (PTCAS). Visit www.ptcasinfo.org for detailed information and www.ptcas.org for the application. The PTCAS phone number is 617-612-2040.

Emory University Doctor of Physical Therapy Program

Website: www.emorydpt.org

Phone number: 404.712-5660

International Students

Additional information for international applicants and students can be found at: <http://www.emory.edu/ISSP>

Important information about student insurance can be found at: http://studenthealth.emory.edu/hs/new_students/health_insurance/index.html.

Requirements for International Applicants:

Credentialing

All transcripts must be translated into English and sent to credentialing service to determine applicant has the equivalent of an American bachelor degree.

Credentialing must be sent directly from the credentialing service to:

Division of Physical Therapy

1462 Clifton Rd N.E. Suite 312

Atlanta GA 30322

Phone: (404) 712-5660 (General Info)

Phone: (404) 727-4002 (Admissions)

Email: [PT Admissions](mailto:PT_Admissions)

Credentials will not be accepted if sent by the applicant.

English Testing

Applicant must take TOEFL and TSE (test of spoken English) given by Educational Testing Services.

Financial Certificate

Emory will send all international applicants a financial certificate form. This form is used to certify that the applicant has adequate funds to pay for entire duration of program. Applicant will not be able to secure US Financial Aid loans.

Visa

I-20 form will be sent to applicant to secure an F1 Visa (student visa).

Credentialing Service address:

World Education Services

P O Box 5087

Bowling Green Station

New York, NY 10274

info@wes.org

Notice of Acceptance and Intent to Matriculate

The applicant will be notified of acceptance or rejection as promptly as possible after the admissions committee takes action on his or her application. Applicants are required to notify the program by email or written communication of their intent to accept the position offer.

Credit Policy for Prior Education and Training

No credits from prior education and training may be applied to the Doctor of Physical Therapy program.

Enrollment Policy

To be enrolled in the program, students must have submitted an application, completed an interview and been selected for admission to the program by the Admissions Committee. Students must also have completed all prerequisites and obtained an undergraduate degree prior to enrollment in the program.

Admission Requirements for DPT Dual Degree Programs

DPT/PhD

Students will make a formal application for admission to Georgia Institute of Technology during their second year in the DPT program.

DPT/MBA

Applicants interested in the dual DPT/MBA program must apply to and be admitted by both of the programs. Students can also apply in the first year of the DPT program to the business school for the dual degree program.

DPT/MPH

Applicants interested in the dual DPT/MPH program must apply to and be admitted by both of the programs. Students can also apply in the first year of the DPT program to the public health school for the dual degree program.

DPT/MA in Bioethics

Applicants interested in the dual DPT/MA in bioethics program must apply to and be admitted by both of the programs. Students can also apply in the first year of the DPT program to the graduate school for the dual degree programs.

Standards of Progress

Academic Regulation regarding program completion:

1. Successful completion of a residency totaling 9 semesters, which includes academic study and 30 weeks of full-time clinical education.
2. Completion of all semester hours of work with an overall average of B. A student must have a cumulative grade point average of 3.0 or higher in order to graduate from the program.
3. A grade of B or above must be earned in each individual course. Note: Physical Therapy requires mastery of both academic and psychomotor clinical skills, therefore, an exception to this rule exists in the following clinical courses: Fundamentals of Clinical Measurement (DPT 710), Introduction to Therapeutic Interventions (DPT 740), General Medical Conditions (DPT 755), Musculoskeletal Rehabilitation (DPT 800), Pediatric Rehabilitation (DPT 815) and Adult Neurorehabilitation (DPT 810), where ALL practical examinations must be passed with a minimum score of 80% to successfully pass the course, regardless of the student's cumulative average for that course. If a student fails a practical examination, he/she could be offered a retest at the discretion of the course instructor(s). If the student fails the final practical, the retest is

offered no more than 4 weeks after the initial practical examination. If the student fails the retest, this constitutes failure of the course, and at that point, the student is placed on academic probation. Any subsequent examination is considered a remediation. In addition, students need to attain a cumulative average of 80% or better overall in the written examinations within General Medical Conditions (DPT 755), Musculoskeletal Rehabilitation (DPT 800), Pediatric Rehabilitation (DPT 815) and Adult Neurorehabilitation (DPT 810).

4. Students may continue in a course if a single written examination score falls below the minimal score of 80%, but the average examination score for the entire course must be at or above the minimal score to pass the course. A student who scores less than 80% on any examination must contact the course director to discuss areas of deficiency. Failure to do so will negatively affect any potential decision for future remediation opportunities.
5. Successful completion of each clinical rotation as defined in course materials.
6. Progression through the curriculum is dependent upon successful completion of all courses in sequence and upon recommendation by the Faculty each semester. Any changes in sequence must be approved by the Faculty.

All grades are determined by the following criterion-based system:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
59% or below	F

Academic Regulation regarding remediation:

The student who achieves a final course grade below the minimal passing score of 80% may qualify for remediation. Should a decision be made to provide an additional opportunity, the student will be placed on academic probation. The course instructor then completes a Record of Academic Probation Recommendation Form. (see section on Academic Deficiency and Probation).

In regards to remediation opportunities, the following policies are observed:

1. Remediation opportunities are offered at the discretion of the course director.
2. To qualify for remediation, the student MUST show evidence of having contacted the course director during the course to discuss any performance that failed to meet minimal standards. The course instructor completes a Record of Academic Deficiency Counseling Form whenever the student is counseled regarding deficiencies in academic work. (see section on Academic Deficiency and Probation).

3. This policy for remediation will also apply to students who fail to pass a practical examination in any course that includes practical examinations.
4. Remediation of a course may involve re-taking a written examination, an oral or practical examination, or the completion of a remediation project.
5. All remediation activities must be completed within the timeframe defined by the course director, and before the end of the following semester.
6. Students will receive a course grade of 'IP', "In Progress", until successful remediation is completed.
7. For remediation to be considered successful, the student must attain the minimal passing score of 80% on the remediation activity (see #4 above). As a consequence of having to remediate, the highest grade attainable for the course will be a "B". All questions regarding examination and grading should be addressed directly through a meeting with the student and the course director.
8. A student is allowed only one opportunity beyond the initial attempt to satisfactorily complete the requirements for a given course. Students who fail a remediation examination will fail that course.
9. Students must pass all courses to progress in the program. Students who fail a course must repeat and pass the course before progressing in the program.
 - a. Permission to repeat a course is contingent upon approval of the faculty.
 - b. Repeating a course will require the student to take a leave of absence for one year, as the sequence of the program is inflexible and progression is contingent upon passing all subsequent coursework.
 - c. A student who is offered the opportunity to repeat a course will be required to attend all concurrent coursework and complete all examinations and assignments, even though these courses were already successfully passed. This is done in the best interest of the student, as course information is updated each year.
10. There are concurrent and cumulative limits to the number of opportunities offered to a student for re-examination to meet criteria. There is a limit, per semester, to the number of courses in which a student is allowed to be re-examined. There is also a limit to the cumulative total of course re-examinations that are allowed during the program.
 - a. No more than **TWO course re-examinations are allowed per semester**
 - b. No more than a cumulative total of **FOUR course re-examinations are allowed throughout the entire program.**
 - c. Cumulative totals to the number of remediation opportunities continue to apply to students who must repeat coursework.

Consequences for Violation of an Academic Regulation:

A student may be placed on academic probation or dismissed from the program at any time in the curriculum when academic or other performance requirements are not met. If any one of the above conditions are not met or exceeded, the student situation will be first brought before the Academic Affairs Committee for consideration of dismissal from the program. The student will be invited to make a statement at that time.

Dismissal from the program may result if a student:

1. Fails a repeated course.
2. Exceeds the total number of remediation opportunities per semester or per program.
3. Violates the Honor Code.

The recommendation of the Academic Affairs Committee is based on the overall performance of the student within a specific course, as well as throughout the overall program of study. The recommendation of the Academic Affairs Committee is brought to the Division of Physical Therapy Faculty for the final decision. The full-time faculty will meet in session to consider the recommendations of the Academic Affairs Committee. If a majority of the full-time Physical Therapy Faculty votes to dismiss the student, the Director of the Division of Physical Therapy will make a recommendation to the Dean of the School of Medicine that the student be dismissed. The recommendation will specify the reasons for dismissal, including the regulation or standard violated.

Should the student wish to appeal this decision, a formal appeal in writing must be first sent to the Director of the Division of Physical Therapy within 48 hours of notification of dismissal. Appeals will be reviewed and voted on by the Faculty. Subsequent appeals will be directed directly to the Dean of the School of Medicine. The Dean will make any final decisions regarding dismissal of the student.

Degree Requirements

Students must complete a residency of nine, continuous semesters of academic study, including thirty weeks of full-time clinical education. Throughout the program, the student devotes a minimum of thirty hours each week to classroom, laboratory, and clinical activities. Students are advised against employment during enrollment.

Students must successfully complete all courses in sequence. Satisfactory performance includes: completion of one hundred and forty-four semester hours with an overall average of B or above (a grade of B or above must be earned in all courses); successful completion of each clinical assignment with a

grade of B or above; and recommendation for continuation each semester by the Academic Affairs Committee and faculty. For all degree programs, the majority of required credits for graduation must be earned at Emory University School of Medicine.

Tuition and Fees Information

The cost of attending Emory University includes tuition and other academic charges, living expenses, and incidental expenses, such as textbooks and supplies. Charges for summer semester are the same as for any other term unless specified otherwise.

As costs continue to rise throughout the economy, the University anticipates that educational costs will be adjusted from time to time. The University reserves the right to revise tuition and other charges when necessary.

Tuition and Fees for 2017–2018 (per semester)

Tuition for Physical Therapy Program	\$12,133
Activity Fee (fall and spring semesters)	\$92
Activity Fee (summer semester)	\$0
Athletic Fee (fall and spring semesters)	\$142
Athletic Fee (summer semester)	\$55
Mental Health and Counseling Fee	\$80
Immunization and Disability Fee	\$125
Technology Fee	\$70

Tuition and Fees for 2017–2018 (per semester)

Clinical Administrative Fee \$25

Transcript Fee (1st semester only) \$70

The Immunization and Disability Fee covers the cost of administering the immunizations, the PPD tuberculin skin tests, and the care and treatment of students with positive PPD conversions, as well as the cost of long-term disability insurance. Tuition charges cover tuition, use of all facilities of instruction, general medical and health services, and library services.

If a student remains in school and drops a portion of work after the last day for change of courses, the student will not receive a refund for the work dropped. Students who have completed course and residence requirements for their degree but remain in residence to complete special projects (without obtaining credit) or to prepare for examinations must register at the beginning of each semester. Such registration requires a \$500 fee.

Refund Policy

Students who withdraw from the curriculum for any reason may qualify for a tuition refund on a semester basis. Tuition refunds will be calculated as follows:

Withdrawal during	Charge	Credit
First week (through Drop/Add)	0%	100%
Second week	20%	80%
Third week	40%	60%
Fourth week	60%	40%

Withdrawal during	Charge	Credit
Fifth week	80%	20%

There will be no refunds after the fifth week of any semester.

Audit Courses

The same charge for credit courses applies. Audited courses may not be established for credit by examination nor may audit courses be transferred to credit courses after the first week of classes.

Financial Assistance

Prospective students who need financial assistance should begin early to investigate aid available to them. They should complete the Free Application for Federal Student Aid (FAFSA) as soon as possible. The FAFSA can be accessed on the web at www.fafsa.ed.gov. The Emory University school code is 001564. Students begin the Doctor of Physical Therapy program in the summer semester, which is the last semester of the financial aid year. Students beginning in Summer 2019 must complete a **2018-2019 FAFSA** for Summer 2019 as well as a **2019-2020 FAFSA** for Fall 2019, Spring 2020 and Summer 2020.

Further information regarding financial assistance for students in the Doctor of Physical Therapy Program can be accessed at <http://med.emory.edu/education/financial/dpt/index.html>.

All matriculating students with loans must complete a mandatory online entrance interview as well as an exit interview upon graduation.

Scholarships

There are a limited number of scholarships for physical therapy students based on financial need. Eligibility is based on information from your FAFSA, and no additional application is required. A few merit scholarships may be awarded to incoming students based on merit, and these do not require an application, either.

Health Professions Tuition Loans

Students are eligible to borrow from the University to assist in paying tuition. No additional application is required.

Federal Loans

The Office of Financial Aid will determine a student's eligibility for federal direct Stafford Loans. Students who wish to accept those loans will be given instructions on how to complete the loan promissory note when they receive their financial aid award letter. Students interested in the federal direct GradPLUS Loan for additional funds should wait until they receive their initial award letter, then complete a GradPLUS Request Form that can be downloaded from the Office of Financial Aid website.

Private loans

Students who need additional funds beyond the amount awarded by the Financial Aid Office may apply for private student loans. These loans require the borrower to undergo a credit check, and the interest rate is determined by the student's credit score. More information about these and all other student loans is available on the Financial Aid Office website at

<http://www.studentaid.emory.edu/types/loans/private.html>

Veterans Benefits

Students eligible for Veterans Administration Benefits should notify the Office of Financial Aid and coordinate this information with the Office of the Registrar. Also, Emory participates in the Yellow Ribbon Program for post-9/11 veterans. One Physical Therapy student with 100% eligibility for post-9/11 benefits will receive \$6500 per year in addition to any other veteran's benefits. For additional information, contact the Associate Director of Financial Aid & Scholarships at the School of Medicine at (404) 727-5683.

Other Scholarships

Some professional organizations for people in the health care industry offer scholarship opportunities. Students can research these programs by searching on the web, by talking to faculty members in their academic program and by referring to the scholarship information in the Orientation Manual. In most cases, a separate application would be supplied by the sponsor of the scholarship.

Recently, the Division has added the Ian H. Tovin Scholarship, the Frank S. Blanton Jr. MD Humanities in Rehabilitation Scholar Award and the Steven L. Wolf Scholars Fund to recognize merit and assist students. More information on the scholarships can be found @ <https://www.emorydpt.org/apply-now/scholarships/> .

The Division of Physical Therapy also offers a large number of graduate assistantships to the DPT III students. Students receive an announcement during summer to submit their GA application. Typically, the graduate assistantship starts in the fall semester of the final year of the DPT program. These assistantships are offered on a competitive basis.

Payment Plan

Students have the option of making four separate monthly payments for their tuition and fees via the Emory Payment Plan (the summer plan is divided into three payments). There is a \$60 fee to make use of the payment plan. See for <http://studentfinancials.emory.edu/emory-payment-plan-sa.aspx> details.

Books

The Emory University Bookstores, located in the Oxford Road Building, stock new and used textbooks for all Emory courses, as well as a broad selection of study aids, general and scholarly trade titles, school and office supplies, Emory-imprinted clothing and gifts, and many other items.

Equipment

Each student is required to furnish certain equipment which must meet standard requirements of the faculty. The University assumes no financial responsibility for the equipment.

Campus Dining

Meals are available at several campus dining areas. For additional information, check out the Emory Dining website at www.emory.edu/dining.

Housing

Emory University does not provide on-campus housing for graduate students. However, the University provides information regarding off-campus housing. Contact them at their website at <https://offcampushousing.emory.edu/>

Transportation

Atlanta's Hartsfield-Jackson International Airport makes Emory readily accessible to or from any part of the world. Airport limousines provide transportation to the campus. Rapid transit authority buses connect Emory to Atlanta's rapid rail system (Lindbergh Station) and all parts of the city.

Campus shuttle buses operate weekdays, stopping at various points around campus, including the parking decks, University housing, Emory University Hospital and Clinic, Emory Rehabilitation Hospital, and Wesley Woods. For a schedule and route map, contact the Transportation and Parking Services Office at 1945 Starvine Way (in the Clairmont campus parking deck). <http://transportation.emory.edu> . The Grady Memorial Hospital bus offers free round-trip service to Grady, Emory University Hospital Midtown, and Emory University.

School's Academic Calendar

Class of 2018– 2021

*TENTATIVE Academic Calendar****

June 6th, 7th, 8th 2018	Registration and Orientation
June 11, 2018	Summer semester classes begin
July 4 th , 2018 (Wed)	Independence Day Holiday
August 13 th (M)- Aug 20th (Mon)	Exams
August 21(Tu)- August 26, 2018	Break
August 27, 2018	Fall Semester begins
September 03, 2018	Labor Day Holiday
Oct 13-21 2018	Fall break
November 21- 25, 2018	Thanksgiving break (Nov 22)
December 6(Thurs)- 14(Fri) 2018	Exam Week for Fall Semester
December 15 - January 6, 2019	Winter Break
January 7th(M) 2019	General Medical Complex begins
January 21, 2019	Martin Luther King Holiday
April 8-19, 2019	General Medical Clinical Block
April 22,23 2019 (Mon, Tues)	Exams
April 24- 28 , 2019	Break
April 29 th 2019	Musculoskeletal Rehab begins
May 9th , 2019	Poster Day
May 27th , 2019	Memorial Day Holiday
July 4, 2019(Thurs)	Independence Day Holiday
July 29-Aug 9, 2019	Musculoskel Rehab Clinical Block
August 12-16, 2019	Exams
August 17-25, 2019	Break
August 26, 2019	Neuro Rehab begins
September 2, 2019	Labor Day
To be determined	Fall Break
November 27-Dec 1,2019	Thanksgiving break (Nov 28 2018)
Dec 2th -Dec 13th, 2019	Neuro Rehab Clinical Block
December 16-20, 2019	Exams
December 21 -January 5, 2020	Winter Break
January 6- March13 , 2020	Clinical Internship I
March 14-22, 2020	Travel Week
March 23-May 29, 2020	Clinical Internship
May 30-June 7, 2020	Travel Week
June 8-August 14, 2020	Clinical Internship
August 15-23, 2020	Travel Week
August 24- 2020	Fall semester starts
September 7, 2020	Labor Day

November 25-Dec 29th, 2020
Dec 7th-Dec 11th 2020
December 12- Jan 10, 2021

Thanksgiving (Nov 26, 2020)
Exam week
Winter Break

January 11th 2021
February 2021 (TBD)
May 3th –May 7th 2021
May 6 2021
May 10, 2021

Spring semester begins
Degree Application Deadline
Exam period
Poster day
Graduation

***** IMPORTANT: This schedule is TENTATIVE. Dates are subject to change**

Doctor of Physical Therapy Courses

DPT 700 Health Promotion, Wellness, and Prevention: Individual level, 1cr

DPT I, Required, Letter Grade

Instructor: Sara Pullen, DPT, MPH

Introduction to fundamental concepts of health, wellness, screening for risk, and the theoretical bases underlying behavior change.

DPT 705 Human Anatomy, 4 cr

DPT I, Required, Letter Grade

Instructor: Jessica Santucci, DPT, OCS

Study of the structures and functions of systems of the body focusing on the nervous, musculoskeletal, circulatory and pulmonary systems. Includes human cadaver dissection.

DPT 710 Fundamentals of Clinical Measurement, 3 cr

DPT I, Required, Letter Grade

Instructor: Jenny Sharp, DPT, CCS

Introduction to the physical therapist model of clinical practice with an emphasis on basic examination skills. Procedures covered include methods for determining strength and range of motion and basic cardiopulmonary assessment.

DPT 715 Kinesiology and Biomechanics, 4cr

DPT I, Required, Letter Grade

Instructor: Benjamin Rogozinski, DPT

Introduction to biomechanical principles of human movement. Includes discussion of the mechanical principles underlying the movement of individual joints, connective tissue mechanics and the analysis of posture and gait.

DPT 720 Ethics and Professionalism, 2 cr

DPT I, Required, Letter Grade

Instructor: Bruce Greenfield, PhD, PT

Introduction to ethics, laws, and professionalism in physical therapist practice.

DPT 725 Interpersonal Communications, 2 cr

DPT I, Required, Letter Grade

Instructor: Logan Kaleta, PhD

Listening, as well as talking, are skills inherent to providing the best patient care. This course fosters the development of skills in the interpersonal and problem-solving processes.

PT 730 Systems Physiology, 5 cr

DPT I, Required, Letter Grade

Instructors: Mark Lyle, PhD, PT; Patricia Nichols, BSc; Joe Nocera, PhD

Study of the physiology of the nervous, musculoskeletal, respiratory, cardiovascular, endocrine, excretory, digestive, and reproductive systems of the body.

DPT 735 Neuroscience, 4 cr

DPT I, Required, Letter Grade

Instructor: Trisha Kesar, PhD, PT

Structure and function of the human nervous system with emphasis on a movement control model. Course includes human brain dissection labs.

DPT 740 Introduction to Interventions, 3 cr

DPT I, Required, Letter Grade

Instructor: Peter Sprague, DPT, OCS

Evidence-based course designed to provide students with the basic principles for determination of exercise need and the prescription of exercise programs and the determination of safe and appropriate application of physical modalities.

DPT 745 Growth Process through the Lifespan, 4 cr

DPT I, Required, Letter Grade

Instructors: Durga Shah, DPT, PCS; Sarah Caston, DPT, NCS, GCS

The interactions of perceptual-motor, cognitive, and psychosocial influences on the developing human and the processes of individual and family reactions to stresses of aging, health changes, death, and dying. Integrated practical/clinical experiences in well-baby, child day care, and elder care/residential settings.

DPT 750 The Teaching and Learning Process in Physical Therapy, 2 cr

DPT I, Required, Letter Grade

Instructor: Bruce Greenfield, PhD, PT

Much of physical therapy involves teaching – teaching the patient, family members, other health care professionals, insurance providers. This course develops skills in the teaching-learning and problem-solving processes.

DPT 755 General Medical Conditions, 12 cr

DPT I, Required, Letter Grade

Instructors: Kathy Lee Bishop, DPT, CCS; Jenny Sharp, DPT, CCS

Evidence-based physical therapist examination, diagnosis, and management of patients with cardiac, pulmonary, wound, cancer, and metabolic conditions. Content integrates pathophysiology and medical management of patients. Includes congruent, weekly patient oriented experiences and culminates in a two week, full-time clinical education experience.

DPT 760 Medical Genetics in Physical Therapy, 3 cr

DPT I, Required, Letter Grade

Instructor: Patricia Nichols, BSc

The course will elucidate the process of cell division, gamete production and sexual reproduction in males and females. Further study will explore the relationship of molecular and cellular genetics, transmission genetics and population genetics. The student will gain an understanding of the role of genes and chromosomes in determining structure and function in health. Risk assessment will be addressed for

inherited and somatic genetic diseases including the interaction of genetic and environmental factors in contributing to multifactorial diseases, such as carcinogenesis. These concepts will be considered in the context of the lifespan of an individual, inheritance through pedigree analysis, and populations. Clinical applications for screening, genetic testing and gene therapy will be considered.

DPT 765 Evidence-Based Practice, 2cr

DPT I, Required, Letter Grade

Instructor: Marie Johanson, PhD, PT, OCS

The purpose of the course is to gain competence in critical analysis of the research literature through the use of fundamental concepts of the inquiry process. This course provides the foundation for 1) evidence-based physical therapy practice and clinical reasoning used in General Medicine, Musculoskeletal Rehabilitation, Adult Neurorehabilitation, Pediatric Rehabilitation, and Internship I, II, and III and 2) student research projects in Clinical Research I and II (DPT 915 and DPT 925).

DPT 800 Musculoskeletal Rehabilitation, 10 cr

DPT II, Required, Letter Grade

Instructors: Kathleen Geist, DPT, OCS; Peter Sprague, DPT, OCS

Evidence-based physical therapist examination, diagnosis, and management specific to adult and pediatric patients with musculoskeletal conditions. Content integrates pathophysiology, medical management, and physical therapy assessment and treatment, including manual therapies. Incorporates congruent, weekly patient oriented experiences and culminates in a two week, full-time clinical education experience.

DPT 805 Principles of Motor Learning, 3 cr

DPT II, Required, Letter Grade

Instructor: Michael Borich, PhD, PT

This course will provide the student with a theoretical basis and historical overview of motor learning and its application to motor skill acquisition. Since teaching acquisition or re-acquisition of motor skills is a foundation for physical therapy interventions, this course will provide students with core knowledge and a theoretical framework upon which to build therapeutic interventions. The course will include the basic tenets of: the relation of task, individual, and environment and motor skill acquisition, practice schedules, and the role of feedback. Materials will focus on cognitive and motor aspects of skill acquisition.

DPT 810 Adult Neurorehabilitation, 7 cr

DPT II, Required, Letter Grade

Instructors: Tambre Phillips, DPT, NCS, MBA; Laura Zajac-Cox, DPT, NCS

Examination, diagnosis, and management of the adult patient with neurological conditions. Content integrates pathophysiology, medical management, and physical therapy assessment and treatment. Students will learn examination techniques and validated outcome measures to evaluate disability, impairment, and functional deficits and to measure the outcomes of treatment. Students will develop interventions based upon available evidence and the principles of motor learning. Includes congruent, weekly patient-oriented experiences and culminates in a two week, full-time clinical education experience.

DPT 815 Pediatric Rehabilitation, 4 cr

DPT II, Required, Letter Grade

Instructor: Benjamin Rogozinski, DPT

This course will provide the student with foundation knowledge of primary and secondary conditions which result in activity limitations and disability across childhood. The roles of other medical professionals on the pediatric rehabilitation team will be presented including the physician and surgeon. Students will use pediatric specific examination techniques, standardized methods of testing and valid outcome measures to evaluate functional motor skills, coordination, other physical therapy problems, and to measure the outcomes of treatment. Students will develop intervention plans based upon available evidence and apply principles of motor learning during functional training. Physical therapy management of the child will be addressed in the context of the child's interests, diagnosis, prognosis, age, environment of care and the child's family.

DPT 820 Health Service and Management, 3 cr

DPT II, Required, Letter Grade

Instructors: Beth Davis, DPT, MBA; Diane Spencer, MS, PT

This course is the second course in the health services management series and builds on learning in the previous course that focused on professionalism; ethical/legal guidelines and standards for practice; and professional roles, responsibilities and obligations. Specifically, this course focuses on the factors affecting the client's entry into and progression through the healthcare system, including the effect of current financial, legal and regulatory policies that affect the client, the client/professional relationship, and the practice of physical therapy. This course will also instill an entrepreneurial mindset and prepare the student for participation in administrative activities. The course will provide a glimpse of primary business disciplines including market research and strategy, marketing, finance, operations, and management.

DPT 825 Exploration of Human Behavior, 2 cr

DPT II, Required, Letter Grade

Instructor: Suzanne Penna, PhD

A tendency to underestimate the incidence of behavioral and cognitive problems can have a negative effect on treatment outcome and the return of the patient to normal activities. Therapists need to be able to recognize these behaviors, recognize how we react to the behaviors in our clients, measure these behaviors, and assess the effect of these behaviors on treatment planning and outcome. The course will cover behavioral and cognitive problems and the psycho-social-cultural aspects of disability. Class sessions will be primarily small group discussion and lecture.

DPT 830 Internship I, 10 cr

DPT II, Required, Letter Grade

Instructors: Patricia Bridges, EdD, PT; Tambre Phillips, DPT, NCS, MBA

The first of three, full-time supervised clinical experiences in a variety of clinical settings. Each student completes a 10 week, full-time experience in an acute care facility, in a rehabilitation facility and in a community setting.

DPT 835 Administration and Consultation in Healthcare, 2cr

DPT II, Required, Letter Grade

Instructor: Beth Davis, DPT, MBA

Practical experience in planning, implementing, and evaluating an administration/ consultation project in a clinical setting. Concurrent with full-time, clinical experiences

DPT 840 Internship II, 10 cr

DPT II, Required, Letter Grade

Instructors: Patricia Bridges, EdD, PT; Tambre Phillips, DPT, NCS, MBA

Continuation of full-time supervised clinical experience. This course is the second, ten week experience.

DPT 900 Internship III, 10 cr**DPT III, Required, Letter Grade****Instructors: Patricia Bridges, EdD, PT; Tambre Phillips, DPT, NCS, MBA**

Continuation of full-time supervised clinical experience. This course is the third, ten week experience.

DPT 905 Current Practices in Physical Therapy Care, 2cr**DPT III, Required, Letter Grade****Instructor: Bruce Greenfield, PhD, PT**

The course requires students to write several reflective narratives about their clinical experiences and to comment and discuss the themes and levels of reflection of their narrative with each other via an electronic chat room on Blackboard. The goal is to help students develop reflective skills consistent with expert practice, and to provide students opportunities for self-reflection and to welcome uncertainty and see difficult or problem situations and patients as areas for creative problem-solving versus unsolvable problems. Concurrent with full-time, clinical experiences.

DPT 910 Advanced Medical Screening, 3 cr**DPT III, Required, Letter Grade****Instructor: Kathleen Geist, DPT, OCS**

Identification of problems that may require consultation with or referral to another practitioner based on history, systems review, and clinical evaluation; identification of problems that are outside the scope of physical therapy practice, and enhancing the ability to efficiently communicating examination/evaluation findings to other healthcare practitioners. The student will be able to integrate medical screening concepts to prepare the student for autonomous practice in a collaborative healthcare model. Upon completion of the course; students will be able to apply comprehensive medical screening to patients with complex medical problems with neurological, cardiovascular, and orthopedic dysfunction observed in clinical practice

DPT 915 Clinical Research I, 6 cr**DPT III, Required, Letter Grade****Instructor: Shilpa Krishnan, PhD, PT**

Application of the scientific principles in a research setting. This course sequence is designed to provide the student with the opportunity to actively apply the principles and concepts learned in Evidence-Based Practice to a contemporary research issue. Emphasis is placed on practical application of research principles and the scientific process. Students participate in a group project under the direct guidance of a faculty member actively involved in research activity. Project topics vary depending on the research programs of the faculty. Students will be involved in various aspects of the research process, as appropriate for a given project, such as proposal development, subject recruitment, data collection, data reduction, statistical analysis, interpretation of the results and dissemination to the scientific community.

DPT 920 Health Promotion, Wellness, and Prevention: Community level, 3 cr**DPT III, Required, Letter Grade****Instructor: Sara Pullen, DPT, MPH**

The second of two courses on the topics of health promotion, wellness, and prevention. The purpose of the course is to apply the fundamental concepts of health, wellness, and prevention learned in HP, W&P: Individual level to improve the health and wellness in specific communities. Students will learn to assess the needs of a community, develop, and assess health promotion, wellness, or prevention programs targeting adults at risk for disease development or injury, as well as targeting populations with special needs.

DPT 925. Clinical Research II, 6cr

DPT III, Required, Letter Grade

Instructor: Shilpa Krishnan, PhD, PT

The second of two research courses. The purpose of the course is to answer an original question related to physical therapy practice through the application of the scientific inquiry process. Students will work in small groups with a faculty mentor to collect and analyze data. All students will participate in presenting their project at the Graduate DPT Research Day traditionally held in May prior to graduation.

Elective Opportunities

Elective Opportunities may be taken in different departments and schools within Emory University including the Graduate School, Rollins School of Public Health, and Goizueta Business School. The following are elective courses offered within the Division of Physical Therapy.

DPT 951 Yoga and Meditation/Mindfulness in Physical Therapy, 3 cr

DPT III, Elective, Letter Grade

Instructor: Marlysa Sullivan, MPT

Yoga Therapy is gaining recognition and acceptance worldwide as a complementary healthcare modality. The purpose of this class is to teach the physical therapy student the practices of yoga that are applicable to the physical therapist patient. Concepts underlying yoga and yoga practices as well as their application to a variety of patient conditions will be explored. The student will be able to understand, explain, teach and integrate a variety of yoga practices into their patients' rehabilitation programs.

DPT 952 Business Management for the Physical Therapist Entrepreneur, 3 cr

DPT III, Elective, Letter Grade

Instructors: Beth Davis, DPT, MBA

The purpose of this course is to instill an entrepreneurial mindset in physical therapy students irrespective of the practice environment in which they choose to work. This course is for students interested in learning the art and science of becoming a successful entrepreneur in the physical therapy industry. This course will help students learn planning, operational, and analytical skills that will improve the likelihood of success in starting their own private practices or introducing new services in different health care settings (acute care hospital, rehabilitation center, etc.). Thus, this course is for all students and not just for those wanting to work in out-patient settings or wanting to start their own private clinics. This course will provide a glimpse of a number of primary business disciplines including marketing, finance, operations, management, market research, and strategy. By the completion of this hands-on course, students will have learned how to reduce their risk in starting a new service and increase their likelihood for return. Students will be able to develop and present a new business concept in an effective oral and written manner.

DPT 953 Preceptorship: Neuroscience, 3 cr

DPT III, Elective, Letter Grade

Instructor: Trisha Kesar, PhD, PT

Preceptors will assist with teaching basic neuroanatomy, neuroanatomy lab dissection sessions, electrophysiology lab sessions, managing discussion forums on Blackboard, and facilitating discussion during student presentations.

DPT 954 Manual and Manipulative Therapy, 3 cr

DPT III, Elective, Letter Grade

Instructor: Rich Nyberg, DPT, OCS

The historical development of manipulative therapy is investigated starting with the use of manipulation by bone setters followed by the introduction of manipulation into the medical, osteopathic, chiropractic and physical therapy professions. The various schools of manipulative thought are investigated with recognition to the individual contributors who advanced the practice of manipulation. The current state practice acts regarding the utilization of manipulation in the physical therapy profession is reviewed.

Supportive arguments against the regulation of manipulative therapy within the profession of physical therapy are explored. Theoretical rationale and effects of manipulation are examined with respect to psychological impact, neurophysiologic influences and mechanical changes. Spinal manipulative research and evidence for the use of manipulation is analyzed. Risks, adverse reactions and contraindications are considered. The psychomotor skills required in the successful performance of manipulation are also addressed.

DPT 956 Pilates for the Rehabilitation Professional, 3 cr

DPT III, Elective, Letter Grade

Instructors: Karyn Staples, PhD, PT; ; Megan Hunter, DPT, CSCS

The objective of this course is to introduce the principles of Pilates and their application in a rehabilitation setting. Classes will be case scenario-driven to provide novice physical therapists clinical reasoning and problem solving skills relevant to application of Pilates exercise. Upon successful completion of this course, students will have developed a repertoire of Pilates exercises to apply in multiple rehabilitation settings. They will be familiar with modifications and progressions specific to various patient types and conditions.

DPT 957 Manual Therapy of the Spine and Extremities, 3 cr

DPT III, Elective, Letter Grade

Instructors: Audrey Jones DPT, OCS; Jessica Santucci DPT, OCS

This course focuses on manual therapy for musculoskeletal disorders in the adult orthopedic population. We will review the history of manual therapy, scope of practice and current use by physical therapists. Students will examine the risks and complications related to joint mobilization/manipulation in the context of patient safety. Instructors will present research to support the efficacy and effectiveness of manual therapy. The course will define and explore different types of manual therapy, including soft tissue mobilization, joint mobilization/manipulation and nerve mobilization. Instructors will demonstrate and students will practice spinal, upper and lower quarter manual techniques. Students will learn appropriate home program selection in relation to manual techniques presented. Throughout the course, students will study case presentations to promote an understanding of regional interdependence and to enhance clinical reasoning skills.

DPT 958 Principles of Human Nutrition, 3 cr

DPT III, Elective, Letter Grade

Instructor: Jean Welsh, RN, PhD

Study of human nutrition. Topics include macro & micronutrients (carbohydrates, protein, lipids; vitamins), digestion, absorption, metabolism; energy balance, weight management and the role of nutrition in physical fitness and maintaining health & preventing disease. In addition this course will cover how to plan a healthy diet, the latest dietary guidelines, nutritional supplements and how to identify sound sources of nutrition information and nutrition misinformation (via internet, media, etc.). The course is designed to enhance the nutrition knowledge of the future health professional.

DPT 959 Dry Needling, 3 cr

DPT III, Elective, Letter Grade

Instructor: Virginia Grace Mollohan, DPT, OCS

This course focuses on skill acquisition of dry needling technique and clinical reasoning for implementing the intervention for upper and lower quarter dysfunction including spine. While evidence is limited pertaining to the technique, emerging evidence is supportive and will be explored including some discussion of the strengths and limitations of the current available evidence. Current ongoing research will be explored as well as identifying gaps in the literature. Case based and problem based approaches will be implemented to enhance the clinical reasoning behind the use of dry needling.

DPT 960 Spanish for Physical Therapists, 3 cr**DPT III, Elective, Letter Grade****Instructor: Sara Pullen, DPT, MPH**

Spanish for Physical Therapists is an elective course designed for physical therapy students who want to improve communication skills with Spanish-speaking patients and their caregivers through increased awareness of Hispanic American culture and improved ability to use spoken Spanish to communicate during physical therapy assessments and procedures. Each week a different assessment procedure and related physical therapy intervention is introduced and practiced in role-playing experiences. Assessment topics include: family and home environment, work history, medical history, pain assessment, functional assessment, range of motion testing, muscle testing, neurologic examination procedures, balance and gait assessment, and developmental assessment for children. Treatment procedures include: explanation of precautions, therapeutic exercises, functional training, gait training, and the use of physical modalities. Students also learn to give instructions to patients about appropriate dress for treatment procedures, to make appointments and to give directions to the clinic or to other locations. Class materials including vocabulary lists, exercise programs, and patient education handouts allow students to build a portfolio of resources to use in the delivery of physical therapy services to patients who speak Spanish and very little or no English.

DPT 961 Advanced Acute Care, 3 cr**DPT III, Elective, Letter Grade****Instructor: Kathy Lee Bishop, DPT, CCS**

The purpose of this course is to enhance the assimilation of knowledge and skills to facilitate early mobilization in the intensive care unit. This course is for students interested in integrating problem solving, pathophysiology, electrocardiograms, and technology to achieve early mobilization as part of a multidisciplinary team in the Intensive Care Unit. This course will provide students the opportunity to learn various assessment skills, develop critical thinking and problem solving skills through case-based analysis of patient scenarios. Through this process the students can develop evidence based reasoning for early mobilization in the intensive care unit to impact patient and cost outcomes for the acute care setting. Students have an option to complete an Advanced Cardiac Life Support (ACLS) certification at the end of the elective. Current ACLS certification is required to apply for the American Board of Physical Therapy Specialty - Cardiovascular and Pulmonary Specialty Certification (CCS).

DPT 963 The Endurance Athlete, 3 cr**DPT III, Elective, Letter Grade****Instructor: Kate Mihevc Edwards, DPT, OCS**

This course introduces students to an evidence-based approach to examination (including functional movement assessment and gait analysis), evaluation and treatment of overuse injuries among triathletes. This course will build upon examination of specific lower extremity joints to include an integrated kinetic chain approach to assessment of triathletes' overuse injuries. Students will acquire strategies to facilitate biomechanical improvements in running, cycling and swimming and will learn return to sports activities for this athletic population. Intervention strategies will include specific manual therapy techniques, prescription of running and multisport specific exercises, and gait retraining. Additionally, students will learn the importance of a comprehensive multidisciplinary approach to the management of the triathlete via interactions with a diversity of professionals involved in the care of these athletes.

DPT 964 Preceptorship: Adult Neurorehabilitation, 3 cr**DPT III, Elective, Letter Grade****Instructors: Tambre Phillips, DPT, NCS, MBA; Laura Zajac-Cox, DPT, NCS**

Preceptors will gain experience in teaching neurorehabilitation clinical skills and facilitating clinical decision making, while refining their own skills, using case study formats in a laboratory setting.

DPT 966 Preceptorship: Introduction to Interventions, 3 cr

DPT III, Elective, Letter Grade

Instructor: Peter Sprague, DPT, OCS

Preceptors will receive experience implementing the teaching-learning process in a small group laboratory format which will also include introduction of elements of clinical decision making and interpersonal relations. By assisting in teaching this content, students will also have the opportunity to revise and deepen their own knowledge in evidence based practice as it applies to therapeutic modalities and exercise interventions.

DPT 968 Preceptorship: Spanish for Physical Therapists, 3 cr

DPT III, Elective, Letter Grade

Instructor: Sara Pullen, DPT, MPH

This is an opportunity for one or two students with advanced level Spanish skills to serve as teaching assistants in the Spanish for Physical Therapists course

PT 970 Directed Study, 3 cr

DPT III, Elective, Letter Grade

Instructor: Marie Johanson, PhD, PT, OCS

Specialized leaning experiences related to the student's program, which are not available through formal course offerings. These courses offer student the opportunity to focus on a specific focused area of study and typically culminate in a formal paper and/or presentation to faculty and students.

DPT 969 Health in Aging: Patient Care in the 21st Century, 3 cr

DPT III, Elective, Grade

Instructor: Madeleine Hackney, PhD

Gerontology is the study of aging. The study of aging is not only important for people who are pursuing careers in the fields of gerontology or geriatrics, but will be highly relevant to those seeking to work in any of the health professions given the aging of the patient population in the U.S. This course provides an introduction to four key content areas within health gerontology (health in aging): 1) Social Gerontology; 2) Physical Function and Aging; 3) Sensory and Cognitive Aging, and 4) Psychology and Aging. We will examine a broad range of topics pertinent to the social, physical, and behavioral aspect of aging and health. This course addresses the growing demand for interdisciplinary and multidisciplinary training and education among advanced practice nurses and health professionals.

DPT 971 Preceptorship: Health Promotion, Wellness and Prevention: Community level, 3 cr.

DPT III, Elective, Letter Grade

Instructor: Sarah Pullen, DPT, MPH

This is an opportunity for students in the dual DPT/MPH program to serve as a teaching assistant in the second Health Promotion, Wellness and Prevention course.

DPT 972 Readings in Physical Therapy, 3 cr

DPT III, Elective, Letter Grade

Instructor: Marie Johanson, PhD, PT, OCS

Readings in Physical Therapy provides the student with an opportunity for in-depth review, critique and synthesis of current literature beyond readings not available through formal course offerings. These courses typically culminate in a formal paper and/or presentation to faculty and students.

DPT 974 Preceptorship: Pediatric Rehabilitation, 3 cr.

DPT III, Elective, Letter Grade

Instructor: Benjamin Rogozinski, DPT

This is an opportunity for students with a strong interest in pediatrics to serve as a teaching assistant in the Pediatric Rehabilitation course.

DPT 976 Advanced Human Anatomy, 3 cr

DPT III, Elective, Letter Grade

Instructor: Jessica Santucci, DPT, OCS

Human cadaver dissection to identify anatomical characteristics of different body systems with emphasis on correlating these characteristics to clinical implications. The students identify two body regions, based on their clinical interests and in consultation with the instructor, for detailed dissection and study.

DPT 978 Spinal Orthopaedic Physical Therapy, 3 cr

DPT III, Elective, Letter Grade

Instructor: Rich Nyberg, DPT, OCS

Functional anatomy, clinical biomechanics, and neurophysiologic aspects of neck and back problems with special emphasis placed on detecting spinal motion dysfunction during the clinical examination and manual therapy techniques.

DPT 980 Advanced Study of Extremities, 3 cr

DPT III, Elective, Letter Grade

Instructor: Michael Wooden, MS, PT, OCS

Medical screening and differential diagnosis for patients with orthopedic extremity joint conditions including tissue responses to trauma and immobilization, abnormal mechanics, fractures, dislocations, upper and lower extremity overuse syndromes and gait dysfunction.

DPT 982 Fundamentals of Strength and Conditioning, 3 cr

DPT III, Elective, Letter Grade

Instructor: Benjamin Rogozinski, DPT

This course will provide a comprehensive overview of strength and conditioning and is designed specifically to prepare students for the nationally accredited Certified Strength and Conditioning Specialist (CSCS) certification exam. Content involves an extensive review of the basic exercise sciences including anatomy, exercise physiology, and biomechanics. In addition, the fundamentals of performance nutrition, exercise technique, program design and administration, and testing and evaluation will be covered.

DPT 984 Advanced Pediatrics, 3 cr

DPT III, Elective, Letter Grade

Instructor: Durga Shah, DPT, PCS

Research evidence supporting examination and management of pediatric patients with specific musculoskeletal conditions; includes process of bone modeling as well as the developmental changes in joint mobility and alignment related to functional movement from birth through skeletal maturity.

DPT 986 Vestibular Rehabilitation, 3 cr

DPT III, Elective, Letter Grade

Instructor: Richard Clendaniel, PhD, PT

This intense, evidence-based, five-day course consists of lecture and laboratory sessions with additional self-study sessions. All participants will be expected to demonstrate assessment skills to faculty including: oculomotor examination with emphasis on the identification of nystagmus and canal involvement; and balance and gait, fall risk, and functional assessments. Participants will also be expected to demonstrate appropriate treatment procedures for BPPV affecting posterior, anterior, and horizontal canals for both cupulolithiasis and canalithiasis, for unilateral and bilateral peripheral vestibular disorders, and for central vestibular disorders including traumatic brain injury and stroke. Emphasis will be on using assessment results to develop an effective treatment plan. The course will include written, video, and practical examinations.

DPT 988 Interfacing Engineering Technology and Rehabilitation, 3cr

DPT III, Elective, Letter Grade

Instructor: Steven Wolf, PhD, PT

This course is designed to introduce the student to the emerging trends in rehabilitation technologies. Lecture and laboratory instruction will help students develop skills in adopting objective criteria for evaluating emerging technologies with alternative methods. The course will feature recent discoveries in research related to rehabilitation technology. Students will learn about the physiological mechanisms governing physical rehabilitation, as well as the tools used to quantify those mechanisms. The course will survey neural prosthetics, brain-machine interfacing, wearable technologies, telerehabilitation, regenerative medicine, robotics, and informatics as well as the processes for technology transfer, patent applications, and licensing.

DPT 990 Sports Physical Therapy, 3 cr

DPT III, Elective, Letter Grade

Instructor: Melissa Marchetti, DPT, SCS

A study of anatomy and biomechanics related to sport injuries. Examination procedures specific to the athletic population will be emphasized. The significance of test findings and the formulation of treatment plans are discussed. Management Strategies for acute injuries, improvement in motion performance and return to sports activities will be demonstrated. Intervention strategies will include first aid, taping, manual therapy, and exercise techniques. The course also investigates the relationships between extremity joint injuries and adjacent regions, including the spine.

DPT 992 Advanced Adult Neurorehabilitation, 3 cr

DPT III, Elective, Letter Grade

Instructors: Tambre Phillips, DPT, NCS, MBA; Laura Zajac-Cox, DPT, NCS

Course content will include advanced study of neurologic diagnoses, examination, intervention, and clinical decision-making. Special attention will be given to various outcome measures and interventions with respect to both theory and practice, with a focus on current evidence-based medicine.

DPT 994 Service Learning, 3 cr

DPT III, Elective, Letter Grade

Instructors: Sara Pullen, DPT, MPH

This course offers the opportunity to explore the physical therapists' role in providing a variety of services to medically underserved communities. Service learning consists of academic learning modules integrated with meaningful community service experiences designed to increase civic responsibility and cultural competence and strengthen communities. The course consists of independently completed web-based learning modules, written reflections, and provision of services to a community. Students will have the opportunity to create their own project or commit to an existing community project (community projects TBA). Student MUST have an agreement with a faculty advisor regarding their service learning project prior to registering for this course.

DPT 996 Preceptorship: General Medical Conditions, 3 cr

DPT III, Elective, Letter Grade

Instructors: Kathy Lee Bishop, DPT, CCS

Preceptors assist in supervising and teaching the DPT I students' laboratory content and techniques related to acute care conditions. This course provides an opportunity to increase understanding and proficiency in the General Medical Conditions course material while applying knowledge and clinical experiences in a teaching environment.