SCHOOL OF HEALTH AND MEDICAL SCIENCES

Interprofessional Health Sciences Campus
123 Metro Blvd.
Nutley, NJ 07110
shms@shu.edu
www.shu.edu/health/ (https://www.shu.edu/health/)

Dean: Jayne Brandel, Ph.D., CCC-SLP
Associate Dean for Academic Affairs and Research: Michael F. La Fountaine, Ed.D., ATC, FACSM
Assistant Dean for Undergraduate and Clinical Education: Natalie Neubauer, Ed.D., CCC-SLP
Assistant Dean for Interprofessional Education and Operations: Vasiliki Sgouras-Kapralos, M.D.
Assistant Dean for Graduate Enrollment and Student Affairs: Patrick McDermott, Ph.D.

Departments and Programs

Athletic Training: Vicci Lombardi, Ed.D., ATC, Chair
Interprofessional Health Sciences and Health Administration: Nalin Johri, PhD., MPH, Chair
PhD in Health Sciences: Genevieve Pinto Zipp, PT, EdD, FNAP, Program Director
Health Administration: Nalin Johri, PhD., MPH, Program Director
Bachelor of Science in Interprofessional Health Sciences: Jerry-Thomas Monaco, PT, PhD., DPT, Program Director
Occupational Therapy: Ruth Segal, Ph.D., OTR, Chair
Physical Therapy: Lorene P. Cobb., P.T., D.P.T., Ed.D., Chair
Physician Assistant: Christopher Hanifin, Ed.D., PA-C, Chair
Speech-Language Pathology: Caryn Grabowski, MS, CCC-SLP, BCS-S, Chair

Faculty: Balasubramanian; Baumley; Bernet; Boergers; Bolden; Capone Singleton; Chennupati; Cobb; D'Abundo; D'Andrea; Dayalu; DeLuca; DeSio; Downer; Duff; Dunn; Fernandez; Fiore; Folckomer; Gogtas; Grabowski; Guthrie; Hanifin; Lombardi; Hubler; James; Johnson; Johri; Kolodny; Koutsoftas; LaFountaine; Latawiec; Lin; Lis; MacGregor; Marshall; McCarthy; McWeeney; Miller; Monaco; Morano; Nagle; Neubauer; Patel; Picard; Podvey; Reiner; Rippon; Ritter; Rodriguez; Saunders; Segal; Sgouras-Kapralos; Sheikovitz; Snowdon; Wagner; Walsh; Zipp

The School of Health and Medical Sciences offers both undergraduate and graduate programs in health sciences. By design, the programs are intended to prepare healthcare practitioners to competently, competitively and creatively function in a dynamic healthcare environment.

General Information

The School of Health and Medical Sciences, established in 1987, is a professional school within the University structure. The School's mission is to prepare healthcare professionals to assume leadership roles in the healthcare arena. To achieve this goal, a variety of unique and innovative educational programs are offered utilizing a multi-institutional/integrated approach to graduate education.

The School combines the expertise of Seton Hall University with the resources of affiliate healthcare sites to provide exemplary academic and clinical education in health sciences and health administration.

The School's emphasis on interprofessional education, a forward-thinking approach to healthcare education, prepares healthcare leaders of tomorrow to focus on patient-centered care and to make a difference in their patients' lives and their communities. This innovative team-based approach reflects the future of healthcare delivery; Seton Hall is one of only a few universities using this model. All graduate classes are held on the Interprofessional Health Sciences Campus in Nutley, NJ. General information and admission information is available online (https://www.shu.edu/health/)or from *shms@shu.edu*.

The School offers several innovative graduate programs in the health sciences that prepare healthcare professionals for leadership roles in clinical practice, healthcare management, education and research. The School also offers an undergraduate degree (BS) in health sciences These programs are designed to provide healthcare professionals with an enhanced knowledge base through a flexible and diverse curriculum.

The School offers a Doctor of Philosophy degree in Health Sciences with specializations in health professions leadership, movement science, and speech-language pathology.

The School offers a Master of Healthcare Administration degree that prepares individuals to assume leadership responsibilities in a variety of healthcare organizations.

The School offers a Bachelor of Science in Interprofessional Health Sciences designed to prepare students for diverse degrees in the health sciences with concentrations in Exercise Science and Health Sciences Administration and Management.

The School offers a Master of Science in Occupational Therapy program designed to prepare practitioners who will be equipped to deliver a broad range of occupation-centered services. This skill set includes the ability to design and implement occupation-based interventions across settings and the lifespan (or all age ranges); the ability to critically analyze research and make evidence-informed decisions; and the ability to take on leadership roles and administrative responsibilities.

The Master of Science in Physician Assistant program prepares post-baccalaureate students to perform as certified physician assistants in the broad healthcare arena.

The School offers a Master of Science in Speech-Language Pathology. The program prepares practitioners with the broad-based knowledge and skills to work with the infant-toddler, preschool, school-age, adolescent, adult, and geriatric populations in all settings that employ speech-language pathologists.

The School offers a Master of Science in Athletic Training. The program prepares students to practice as entry-level athletic training practitioners who provide a wide range of patient care services.

The School offers a Doctor of Physical Therapy program. The program is intended to prepare individuals to become professional Doctors of Physical Therapy, who use contemporary and best practices in a safe, ethical, culturally competent and legal manner. Through diverse academic and clinical experiences, graduates are prepared to be critical consumers of the literature as evidence-based practitioners as well

as active contributors and leaders as physical therapists within the health care system and community through education, consultation, and collaboration.

Center for Interprofessional Education in Health Sciences

Genevieve Pinto Zipp, PT, Ed.D., FNAP, Director

The Center for Interprofessional Education in Health Sciences (CIEHS) emerged from strategic planning by the School of Health and Medical Sciences' (SHMS) faculty-led Task Force on Interprofessional Education (IPE). It aims to create meaningful cross-disciplinary educational and research experiences for students, faculty, and clinical partners that further develop SHMS' person-centered care mission.

The Center offers innovative research opportunities and meaningful scholarship activities rooted in a team science approach. Its interprofessional "Journey of Professional Transformation" provides a solid foundation for continuous personal and professional growth, immersion in ground-breaking innovations, and synergistic collaboration among health professions.

This "Journey of Professional Transformation" engages SHMS students in "5 Core Signature IPE Experiences" and "4 Online Asynchronous Learning Modules," providing graduate students with a rich and meaningful two-year continuum of IPE engagement. Through these experiences, our health professions student community learns with and from each other about person-centered care and the role each professional plays as part of the healthcare team.

The overall objective is to support students' growth in teamwork, communication, collaboration, and appreciation of diverse roles and responsibilities across health professions. Each learning experience is designed to develop, foster, and support the person-centered model of care by ensuring students recognize the interdependency among healthcare professionals.

A cornerstone of the CIEHS is to promote interprofessional engagement across and beyond the Seton Hall community, foster student growth as healthcare professionals, and engage in scholarly endeavors that support and guide the future of healthcare and health professions education.

Seton Center for Community and Population Health

Anne M. Hewitt, Ph.D., Professor Emerita, Director

The Seton Center for Community and Population Health (SCCPH) was established in 2004 as an academic resource for collaboration, learning and research to enhance the quality of life for individuals and communities in need. The SCCPH is located in the Department of Interprofessional Health Sciences and Health Administration in the School of Health and Medical Sciences and provides technical assistance to community health agencies focused on improving the health status of New Jersey residents.

The SCCPH follows a partnership approach that facilitates linkages with community stakeholders, healthcare providers and graduate students. Since its inception, the SCCPH has collaborated with eight different community agencies and involved graduate students from the Master of Healthcare Administration (MHA) and other health-related graduate programs at Seton Hall. The Center has successfully developed and completed strategic plans, marketing frameworks, agency needs assessments and community program evaluations. The SCCPH serves as an academic link and resource to local and regional non-profit health-service agencies.

Class Attendance and Academic Integrity

Attendance at each class meeting is expected. Instructors may take class attendance into account when determining grades.

All forms of dishonesty, whether by act or omission, including, but not limited to, cheating, plagiarism, and knowingly furnishing false information to the University, are prohibited. Intentional disruption or obstruction of teaching, research or administrative proceedings is prohibited. University sanctions may extend to suspension and dismissal.

Work submitted in courses must be the product of the efforts of the student presenting it, and contributions of others to the finished work must be appropriately acknowledged. The presentation of another's work as one's own is a serious violation of the academic process, and it is penalized accordingly. The decision on the appropriate penalty is in the first instance the professor's, and it may extend to a failing grade for the course.

Admission Criteria

Admission to the School of Health and Medical Sciences is competitive. Admission decisions are holistic and based on multiple indicators of likely student success; it will not be possible to admit every student who meets minimum qualifications for any one criterion. Program needs and capacities are also factors in the admission decisions.

Grading Policy/Repetition of Courses

Students who have completed SHMS graduate courses and received a grade of C or higher are not permitted to repeat such courses. However, any student receiving a grade of less than "C" (including a grade of "U" when applicable) will receive an automatic failure ("F" grade) and shall be required to repeat the course the next time the course is offered to earn a grade of "B" or higher (or "S", when applicable), in the repeated course and maintain a cumulative grade point average of 3.0 or better. As a result of a course failure, the student shall be placed on academic probation. A student will have only one opportunity to repeat a failed course. Failure to successfully retake and/or pass a failed course will result in a recommendation of dismissal from the program.

Undergraduate students in the BS IPHS program are bound by those policies covering all undergraduate students at the university.

For further information, see the Academic Performance Standards Policy of the School of Health and Medical Sciences (SHMS).

Majors

- Athletic Training (M.S.A.T.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/athletic-training-ms/)
- Health Sciences (Ph.D.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/health-sciences-phd/)

- Master of Healthcare Administration (M.H.A.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/master-healthcare-administration/)
- Occupational Therapy (M.S.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/occupational-therapy-ms/)
- Physical Therapy (D.P.T.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/doctor-physical-therapy/)
- Physician Assistant (M.S.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/physician-assistant-ms/)
- Speech-Language Pathology (M.S.) (https://catalogue.shu.edu/graduate/school-health-medical-sciences/speech-language-pathology-ms/)

Certificates

- Global Health Management Graduate Certificate (https://catalogue.shu.edu/graduate/school-health-medical-sciences/global-health-management-graduate-certificate/)
- Healthcare Administration Graduate Certificate (https://catalogue.shu.edu/graduate/school-health-medical-sciences/healthcare-administration-graduate-certificate/)
- Population Health Management Graduate Certificate (https://catalogue.shu.edu/graduate/school-health-medical-sciences/population-health-management-graduate-certificate/)
- Practice Health Management Graduate Certificate (https://catalogue.shu.edu/graduate/school-health-medical-sciences/practice-health-management-graduate-certificate/)

Note to Students: The following listing represents those courses that are in the active rotation for each department, i.e., have been offered in the past five years. Some departments have additional courses offered more rarely but still available – to find the complete list of all official courses for a department, please use the "Course Catalogue Search" function in Self-Service Banner.

Course Descriptions

GDPT 5101 Internat Clinical Immers Exper (0 Credits)

GDPT 6004 Biomedical Ethics (2 Credits)

GDPT 6122 Principles of Teaching -Lrning (2 Credits)
This course presents the basic concepts and principles underlying teaching and learning in the cognitive, psychomotor and affective domains. Emphasis is placed on the ability to assess the educational needs of varied audiences (patients, caregivers, students, peers, and other professionals) and apply traditional and alternative teaching strategies to facilitate learning in a professional and culturally sensitive manner. The impact of learning preference on teaching style will be addressed. Course experiences will be guided by a spectrum of teaching methods: a framework that delineates options in teaching and learning.

GDPT 6150 Physiology I - Fnd Hum Physio (2 Credits)
This course presents human physiology for the analysis of normal function and adaptive/restorative function available in the presence of health affecting the skeletal, connective tissue, muscular, integumentary, nervous, and other biological systems. Information will be presented at the tissue, organ and system level.

GDPT 6160 Kinesiology I - Bio Hum Motion (2 Credits)
This course presents the application of basic principles of physics, anatomy, and physiology to understand human movement. The development and function of the musculoskeletal system (bone, muscle, and ligaments), the mechanical behavior of these biological tissues, the external/internal forces that contribute to normal motion provides the groundwork for understanding, describing and analyzing the biomechanics of human motion.

GDPT 6170 Crit Think - Clin Reason Proc (1 Credit)
This course introduces the student to the cognitive strategies and processes utilized to (1) collect and interpret information needed to understand a patient's problem/situation, (2) plan and implement appropriate interventions, (3) evaluate the outcomes and (4) reflect on the effectiveness of the reasoning process. Basic clinical and critical reasoning models in the context of patient centered health care and working in a healthcare team is emphasized.

GDPT 6180 Prof Roles in Physical Therapy (3 Credits)
The course introduces the student to the physical therapy profession. Five themes of professional practice are explored; the physical therapist as clinician, consumer of research, inter-professional care provider, lifelong learner and educator. Foundational skills in written and oral communication, professional values and behaviors, population-specific differences, utilization of healthcare informatics and evidenced-based practice are presented.

GDPT 6240 Therapeutic Interventions I (2 Credits)
This course introduces the student to the application of physical therapy intervention skills as part of the treatment process. Emphasis is placed on developing skills in fundamental patient care. Students will be introduced to basic manual therapy techniques, therapeutic exercise, and functional training to achieve patient/client goals & outcomes that address problems resulting from evaluation of the movement system.

GDPT 6250 Human Physiology II (2 Credits)
This course examines the concepts of pathophysiology and the mechanisms of change that contribute to the genesis of a diseased state. Common diseases and disorders are covered and clinical laboratory measurements and values used in differential diagnosis will be presented from a systems perspective. Clinical cases will be used to present standard patterns of clinical examination, evaluation, diagnosis, prognosis, intervention and communication/referral with other health care practitioners. Discussions will address changes in response to disease or trauma across the lifespan.

GDPT 6260 Kinesiology II (3 Credits)
This course builds knowledge and skills in application of biomechanical principles relative to human motion through regional analysis of body segments. Attention is paid to synovial joints as key linkage in the human mechanical system and how their movements are created and governed. The laboratory component of this course reviews individual joint structure and its application to segmental and overall body movement.

GDPT 6270 Human Anatomy (5 Credits)
This cadaveric-based human anatomy course is designed to develop knowledge concerning structural and functional regional gross human anatomy. The course focuses on the clinical application of anatomical concepts in both lectures and laboratory sessions. Structured laboratory sessions also incorporate the use of models, medical terminology and palpation of key anatomical structures. The course utilizes case-based vignettes to promote critical thinking and allow students to apply theory to a clinical population.

GDPT 6280 Clin Assessment - Diag Skl I (3 Credits)
The course facilitates skills acquisition in basic elements of patient examination and professional physical therapy practice. Emphasis is placed on elementary physical therapy examination of the non- medically complex patient. This includes systems screening, selection and performance of basic tests and measures for function, the integumentary, cardiovascular – pulmonary and musculoskeletal systems, interpretation and evaluation of examination findings, differential diagnosis, development of an individualized plan of care, appropriate referrals and effective communication of patient/client information.

GDPT 6290 Critical Inquiry I (2 Credits)
This course is designed to provide students with a working knowledge of the evidence-based research process and its importance in the practice of physical therapy. Students will learn about the variety of research publications and apply the critical appraisal process to the literature.

GDPT 6330 Neuroscience (3 Credits)
This course will cover the basic structure, organization, and function of the central nervous system (CNS). Learning experiences focus on understanding the localization of function within specific structures and pathways of the brain and spinal cord, and typical syndromes associated with vascular accidents, trauma or diseases of the various parts of the CNS.

GDPT 6340 Therapeutic Interventions II (3 Credits)
This course promotes the development of clinical skills related to functional mobility and movement in the home and community including transfers, ambulation, and use of wheelchairs and assistive devices for locomotion and various other activities of daily living (ADL). Therapeutic exercise interventions will be utilized to achieve patient/client goals & outcomes that address problems resulting from evaluation of the movement system.

GDPT 6350 Physiology III - Bioenergetics (2 Credits)
This course presents both the normal and pathological human body responses to physiological conditions and processes in relationship to their influence on human movement including the nutritional and metabolic mechanisms in relation to movement & functional activities. Included are the study of muscle physiology, metabolism, cardiovascular and respiratory adaptations, aging, thermoregulation, aerobic and anaerobic training exercise prescription, and use of ergogenic aides. Topics will focus on evaluation and management for a healthy population as well as for those with chronic diseases and disabilities.

GDPT 6360 Kinesiology III - Posture Gait (3 Credits)
This course provides continued instruction in the study of human movement with regards to posture, balance and gait. The neuromuscular and musculoskeletal mechanisms involved in the development, maintenance and adaptions of posture, balance, and walking will be presented. Students will participate in the assessment of normal and deviated walking, balance and posture including identification of compensatory mechanisms.

GDPT 6370 Comm Htlh-Wellness Outreach I (1 Credit)
This course offers experiential learning in community Health and Wellness outreach while increasing students' awareness of practice settings and offers opportunities for interprofessional collaboration. The course will focus on community assessment utilizing Health/Wellness screening tools appropriate for target populations

GDPT 6380 Clin Assessment Diag Skl II (3 Credits)
This course promotes skill acquisition in elements of physical therapy services and professional practice with an emphasis on physical therapy examination, including systems screening of the medically complex, but hemodynamically stable, patient, with a focus on the neurological and musculoskeletal systems including the extremities, trunk and spine and their relationship to posture, balance and gait. Included are the selection and performance of appropriate tests and measures, interpretation and evaluation of examination findings including differential diagnosis, clinical decision making in the establishment of an individualized plan of care to restore normal movement and functional mobility, referrals and effective communication of patient/client information.

GDPT 6390 Critical Inquiry II (2 Credits)
This course is a continuation of Critical Inquiry I and includes experimental and non-experimental research designs, methodology and statistical concepts. Students will continue to search for evidence and critically appraise it specifically for application to clinical diagnosis, prognosis and treatment effectiveness. Students develop the skills needed to ask and answer clinical questions using best evidence and practice using sample data and statistical software.

GDPT 6432 Lifespan I-Birth to Maturity (2 Credits)

GDPT 6531 Lifespan-Maturity and Aging (2 Credits)

GDPT 6542 Cardiopulmonary Clinical Med (2 Credits)

GDPT 6661 Clinical Internship I (2 Credits)
A full-time clinical practical internship in an outpatient orthopedic clinical setting. Emphasis is on refinement of professional practice and attainment of skills in physical therapy practice and patient management with progression to an intermediate level of performance in the given orthopedic setting.

GDPT 7131 Management of Neuro Problems (5 Credits)
This course will include the following: analysis of mechanisms of motor dysfunction arising from neurological disorders, basic and functional evaluation of neurological disorders and the use of manual and technological methods of intervention to address neuromuscular dysfunction.

GDPT 7140 Therapeutic Interventions III (3 Credits)
GDPT 7140 Therapeutic Interventions III: Motor Learning and Exercise This course integrates the principles of motor control and learning into practice for the advancement of motor skill acquisition. Learning theory is explored as it relates to human movement system. Additionally, this course provides knowledge and skills when developing interventions with therapeutic exercise to achieve patient/client goals &outcomes that address problems resulting from evaluation of the movement system. 3 credits

GDPT 7141 Neurological Clinical Medicine (2 Credits)
Survey of major classes of problems or diagnoses involving the peripheral and central nervous system. Presentation of patterns of practice in the specialties of neurology and neurosurgery.

GDPT 7142 Cardiopul Clinical Med (2 Credits)
This is a survey course of primary and secondary cardiovascular and pulmonary conditions and dysfunctions. The focus of this course will be on standard procedures used including evaluative and diagnostic procedures as well as pharmacological and physical interventions for problems involving the cardiovascular and pulmonary systems.

GDPT 7150 Movement Dev Across Life Span (3 Credits)
GDPT 7150 Movement Development Across the Life Span Overview of human development across the life span from conception to oldest age. Changes in physical, cognitive, and psychosocial development are explored using a framework that highlights the contribution of multiple interacting systems on behavior, performance and movement. Emphasis is placed on the application of tests and measures to discriminate typical from atypical performance, movement and function. 3 credits

GDPT 7152 Research Project II (3 Credits)
The main focus of this course is data collection related to the research proposal that was developed during Research Project I. Students will work closely with mentors to collect data using the proposed methods and written protocol from the research proposal. In-class topics will include data collection, authorship, plagiarism, presentation skills and data analysis. Out-of-class, students will collect and record data, and begin data analysis.

GDPT 7170 Clin Diagnosis and Mgmt I (4 Credits)
GDPT 7170 Clinical Diagnosis and Management I: Cardiovascular & Pulmonary Conditions . Analysis of common pathologies, clinical tests & measures, and interventions used to diagnose and manage movement dysfunction related to the evidence based practice cardiovascular and pulmonary physical therapy. Clinical skills in differential diagnosis include the interpretation of ECG, monitoring, palpation and auscultation of the chest and abdomen, lab values, imaging studies, and exercise tests is developed. Practice guidelines are presented for the application of selected pharmacological, surgical, and psychological and physical therapy interventions with an emphasis on a team approach to patient care and outcome assessment across practice settings. 4 credits

GDPT 7180 Clin Assess Diagnos Skills III (2 Credits)
GDPT 7180 Clinical Assessment & Diagnostic Skills III : Diagnostic Imaging and Electrodiagnostics This course presents the theory and utilization of diagnostic imaging and electro-diagnostics in the management of patients commonly seen in physical therapy. Emphasis is placed on the integration of information garnered from diagnostic imaging and electrodiagnostics for multiple systems and organs of the human body to guide clinical decision making and the establishment of an individualized plan of care, referrals and effective communication of patient/client information. 2 credits

GDPT 7190 Pharmacology (2 Credits)
Problem-oriented approach to examining the most commonly used pharmacologic agents seen in clinical practice. Basic principles of pharmacodynamics and pharmacokinetics, along with pertinent physiology are presented. Practical aspects of dosing schedules, therapeutic effects, interactions and adverse reactions is emphasized, especially as they apply to physical performance, movement, functional activities and safety. 2 credits

GDPT 7230 Clinical Research Experence I (1 Credit)
A faculty mentored research experience involving the collection and analysis of data needed to answer one or more questions related to the practice of physical therapy. Various research options may include experimental studies, surveys, case reports, systematic reviews, and qualitative studies

GDPT 7231 Management-Pediatric Problems (4 Credits)
This is a third-year second semester course, which sets a foundation for the pediatric neurological clinical education coursework and clinical practices to follow. This course will include the following: analysis of mechanisms of motor dysfunction arising from pediatric neurological disorders; basic and functional evaluation of pediatric neurological disorders; and the use of manual and technological methods of intervention to address pediatric neuromuscular dysfunction.

GDPT 7232 Management-Geriatric Problems (2 Credits)
Analysis of the developmental and social/economic factors unique to the resolution of problems occurring in maturity and aging. Development of integrated resource plans involving physical therapy, other healthcare providers, and the financial resources of the health and social systems.

GDPT 7235 Mngmnt of Cardiopulmonary Pblm (3 Credits)
This is a physical therapy clinical management course, in the series of hands-on skills courses taken by entry-level students. The focus is on skill acquisition in both basic and advanced elements of cardiovascular and pulmonary examination and evaluation with emphasis on therapeutic interventions, physical handling skills, health care record information collection and documentation, and screening for cardiovascular and pulmonary systems. This course integrates material presented in the clinical medicine course. Communication skills, professional behavior, critical inquiry, clinical decision-making, cultural sensitivity and patient education are advanced.

GDPT 7240 Therapeutic Interventions IV (4 Credits)
This course focus on the application of modern technology in interventions utilized to achieve patient/client goals & outcomes that address problems resulting from evaluation of the movement system. Topics will include prescription, application and evaluation of orthotics as well as biophysical agent as a component of the plan of care.

GDPT 7250 Psychosocial - Ethical Issues (3 Credits)
An exploration of the psychosocial factors that may influence a patient's response to illness or disability. Topics include coping with stress, loss, chronic pain, depression, altered body image, addiction, abuse, caregiving, and grief. Additionally, principles of ethical decision making are applied to selected health care scenarios along with mechanisms for preventing and reporting fraud, abuse, and unethical conduct. An in-depth review of the physical therapy licensure regulations (state practice act), APTA practice policies, and accreditation standards are also addressed.

GDPT 7270 Clinc Diagnosis-Management II (4 Credits)
Analysis of common pathologies, clinical tests & measures, and interventions used to diagnose and manage movement dysfunction related to evidence based practice in pediatric physical therapy. Emphasis will be placed on congenital and developmental conditions encountered in pediatrics. The administration, application, and interpretation of common pediatric assessments will be presented to assist in the development of comprehensive plans of care to address the needs of families and children with these conditions.

GDPT 7280 Clin Diagnosis Management III (4 Credits)

GDPT 7330 Clinical Research Experence II (1 Credit)
This elective course will allow the student to participate in the analysis and dissemination of information to a professional audience. The selected presentation format may include a journal article, poster presentation or a platform presentation that is ready for submission to a peer-reviewed venue.

GDPT 7340 Mgmt Regulatoryv Iss Heathcare (3 Credits)

GDPT 7350 Comm Hlth Wellness Outreach II (1 Credit)

GDPT 7359 Clinical Practicum III (1 Credit)
This clinical experiential learning experience will facilitate skill acquisition in basic elements of patient service provision for the adult/ pediatric population with increasing complexity in neurological and/or cardiopulmonary conditions. There will be an emphasis on professional practice development and patient/client management skills including basic observational skills, movement analysis, physical handling skills, health care record information collection and documentation, general screening for all systems, elementary physical therapy examination and treatment and essentials of patient-practitioner interaction. This practicum serves as the clinical foundation for preparation of Internship II.

GDPT 7361 Clinical Internship II (2 Credits)
A full-time clinical practice internship in the pediatric or rehabilitative clinical setting. Emphasis on the practice of skills in physical therapy with refinement to professional entry level competence in these settings.

GDPT 7362 Management of Special Problems (2 Credits)
Design of physical therapy intervention for management of special problems otherwise not addressed in the physical therapy professional entry curriculum including: oncology, women's health, mental health, wound care, immune function, etc. Includes discussion of medical/health team management of these special problems.

GDPT 7370 Clin Diagnosis Mgmt IV (4 Credits)

GDPT 7380 Clin Diagnosis Mgmt V (4 Credits)

GDPT 7390 Clin Diagnosis Mgmt VI (2 Credits)

GDPT 7421 Health Care Orgs and Admin (3 Credits)
This course is an introduction to the theory and application of leadership and management principles. The course evaluates the changing healthcare environment and the role of the physical therapist as an autonomous practitioner/ manager/business owner/healthcare leader and advocate within this environment. Fundamental concepts of leadership, management, strategic and operational planning/forecasting, legal structures, business development, networking, marketing, business communication, accounting, finance management, human resource management, information management, third party reimbursement, risk management and third party regulation are introduced within the professional milieu. The content is explored through lecture, discussion facilitation, and team projects leading to a Business Plan and Presentation.

GDPT 7461 Clinical Internship III (6 Credits)
A full-time clinical practice internsnip in an acute/sub-acute/home care, pediatric, orthopedic or rehabilitation clinical site. Emphasis is on the practice of skills in physical therapy with refinemen tto the professional entry level in these settings.

GDPT 7522 Curriculum Integration Seminar (3 Credits)
This capstone course synthesizes the entire curriculum and serves to refine the student¿s final preparation to become an autonomous practitioner, accepting full ownership of his or her practice. The course will focus on curriculum integration, professional development, licensure, career preparation and first employment, ethical/legal issues governing practice, leadership, social responsibility and advocacy. Emphasis is on the role of the Physical Therapist as contributor to society and the profession through practice, lifelong learning, teaching, leadership and scholarly endeavors. In a comprehensive framework, case studies will be utilized incorporating a systems review approach for cardiovascular/ pulmonary, integumentary, musculoskeletal, and neuromuscular systems. Topics such as licensure exam preparation, test taking strategies, mock test taking, professional development, fiscal management, program analysis, contemporary autonomous practice, interview skill development, and legal/ethical issues governing practice will be addressed.

GDPT 7561 Clinical Internship IV (6 Credits)
Full-time clinical practice internship in an acute/sub-acute/homecare, pediatric, orthopedic or rehabilitation clinical site. Emphasis is on the practice of skills in physical therapy with refinement to the professional entry level in these settings.

GDPT 7565 Service Learning Seminar (2 Credits)
Designed to promote experiential learning while advancing the mission and goals of the doctor of physical therapy program and the profession of physical therapy. Students will participate in a semester-long service project in cooperation with community partners. Students will implement a service project to meet a community need and will critically reflect on the experience through discussion, journaling, and portfolio development.

GDPT 7567 International Innov Proj (5 Credits)
This international innovation project course incorporates didactic and experiential learning through transdisciplinary collaboration with international healthcare professionals including physical therapists to address issues in global health. Students will participate in a concentrated semester of learning to promote skills in management, strategic planning, leadership, innovation and entrepreneurship within the healthcare sector. In cooperation with community partners, students design proposals for innovative solutions to meet client needs while exploring the global role of the physical therapist. The content is explored through lecture, discussion, community partner engagement, reflection, portfolio development, and team projects leading to an innovation project plan and presentation. Prerequisite: permission of the physical therapy department.

GDPT 8001 Independent Study (1 Credit)

GDPT 8100 Clinical Internship I (0 Credits)

GDPT 8150 Clinical Educ Seminar (0 Credits)

GDPT 8160 Clinical Reason Capstone Prj I (1 Credit)
This online course, concurrent with Clinical Internship I, allows the student to practice application of clinical reasoning and critical thinking processes in assignments and case studies related to the concurrent clinical experiences. 1 credit

GDPT 8170 Clin Diag Mgmt VII - Multi-Sys (4 Credits)
Analysis of common pathologies, clinical tests and measures, and interventions used to examine, evaluate, diagnose and manage movement dysfunction related to progressive and/or degenerative neuro-musculoskeletal disorders with multisystem dysfunction across the lifespan such as multiple sclerosis, Parkinsonism, ALS, rheumatic diseases, myelomeningocele and Alzheimer's disease will be discussed. Practice guidelines based on practice-based evidence are presented for physical therapy treatments with attention to interventions that optimize functional capacity and performance to achieve individual goals and outcomes. 4 credits

GDPT 8180 Clin Diag Mgmt VIII Urogenital (1 Credit)
Analysis of common pathologies, physical therapy examination, tests and measures, and intervention used to diagnose and manage movement dysfunction following urogenital conditions across the life span. This includes differential diagnosis, interpretation of the imaging studies, pelvic exam, urinary stress testing, pelvic floor muscle strength, posture, and movement patterns. Practice guidelines based on practice-based evidence are presented including application of selected pharmacological, surgical, psychological, with attention to physical therapy interventions that optimize functional capacity and performance to achieve individual goals and outcomes related to the urogenital system. 1 credit

GDPT 8190 Clinical Internship I (4 Credits)
The course is the first full-time clinical practice internship. Emphasis is on development of professional practice and attainment of skills in physical therapy practice and patient management incorporating evidence-based practice guidelines with progression to an intermediate level performance. 4 credits

GDPT 8198 Clinical Internship I (8 Credits)

GDPT 8240 Evidence Based Practice Prjct (2 Credits)

GDPT 8260 Clin Reasoning Capstone Prj II (1 Credit)

GDPT 8290 Clinical Internship II (6 Credits)

GDPT 8291 Clinical Internship II (8 Credits)

GDPT 8360 ClinReasoning Capstone Prj III (1 Credit)
This online course, concurrent with Clinical Internship III, allws the student to practice advanced application of clinical reasoning and critical thinking processes in assignments and case studies related to the concyrrent clinical experiences.

GDPT 8370 Prof Devel and Leadership Sem (2 Credits)
This capstone course synthesizes curricular threads and serves as the students' final preparation as autonomous practitioners of physical therapy. Students will develop professional goals and a structured plan that prepares them to obtain licensure, develop a professional resume, seek employment as a physical therapist, pursure leadership opportunities within the physical therapy profession and become lifelong learners. Meets final 3 weeks.

GDPT 8390 Clinical Internship III (6 Credits)
This is the final full-time clinical internship. Emphasis is on the practice of skills in physical therapy with refinement to entry level performance.

GDPT 8906 Psychosocial Perspect in Pedia (1 Credit)

GMAT 6000 Fndtns of Athletic Training (6 Credits)
This course provides entry-level athletic training students with the basic knowledge of how to perform the various responsibilities of a certified athletic trainer. Students become familiar with the recognition, evaluation, and emergency care of acute athletic related injury/illness. During this class students practice and begin developing taping, wrapping and wellness screening skills.

GMAT 6101 Human Physiology (3 Credits)
Analysis of the patterns of deviation from normal function and adaptive/ restorative function available in the presence of disease or trauma primarily affecting the skeletal, connective tissue, muscular, integumentary and nervous systems. Information will be presented at the tissue, organ and system level. Discussion will address changes in response to disease or trauma over the entire lifespan.

GMAT 6104 Practicum in Athletic training (2 Credits)

GMAT 6111 Functional Human Anatomy (3 Credits)
This course provides entry-level athletic training students the knowledge of functional human anatomy using a regional approach with emphasis placed on the musculoskeletal, cardiovascular, respiratory, and nervous systems and review of the gastrointestinal and reproductive system. Anatomical models, cadaveric dissection and interactive computer software complement didactic classroom activities.

GMAT 6114 Practicum Athletic Training II (2 Credits)

GMAT 6115 General Medical Conditioning (2 Credits)
The focus of this course is on standard differential diagnostic procedures used to evaluate medical conditions as well as identifying the appropriate care and referral to medical specialist. During the lab component, students will demonstrate increasing competence in patient examination, evaluation, and management, prognosis, and intervention skills for general medical conditions. Prerequsite: GMED 6101, GMED 6104.

GMAT 6118 Nutrition and Exercise Pharmacy (2 Credits)
This course integrates principles of nutrition and application to exercising individuals. It examines the dietary practices used in the pursuit of weight maintenance, health, and fitness. This course also discusses the use of performance-enhancing substances and provides insight into how drugs, chemicals and hormones can affect body performance and to what extent such substances can adversely alter biological function(s). 2 credits.

GMAT 6121 Prin Evaluation Athletic Train (4 Credits)
The focus of this course is on evaluation techniques used in Athletic Training. Students will be introduced to more advanced topics in athletic training including acute musculoskeletal pathologies commonly seen in sports. In addition, emphasis is placed on basic physical handling skills, safe and ethical patient interactions, health care record information collection, general screening for all systems, basic musculoskeletal evaluation skills and other essentials of patient-practitioner interaction commonly used in an athletic training setting.

GMAT 6131 Research Methods I (1 Credit)
This course is designed to provide students with an overview of the research process. A variety of research designs will be covered including experimental, quasi-experimental, and non-experimental designs. Methods for gathering representative samples and controlling experiments will also be covered. Students will gain experience collecting and performing elementary statistics on data, and reviewing published research articles.

GMAT 6141 Research Project I (1 Credit)
This course is designed to provide students with the opportunity to design a mentor-supervised research project. Working in teams, students will pursue the initial phase of their research projects by developing the background and research question, developing a rationale, and writing a project proposal. During the subsequent 2 semesters, students will continue to develop and execute the research project. Students may also submit their projects to the IRB of Seton Hall University or HUMC for review.

GMAT 6151 Clinical Practicum I (2 Credits)
The clinical components of this course consist of a two-week immersive experience as well as the traditional 15 week semester long rotation. The athletic training student work on developing hands-on proficiency through the performance of selected athletic training skills with an athletic patient population with the clinical instructor's direct supervision and instruction. The seminar component will reinforce skills learned during the Foundations of AT course.

GMAT 6201 Fndtn Therapeutic Intervention (3 Credits)
This course emphasizes the use of biophysical agents (such as heat, cold, compression, electrotherapeutic techniques), basic manual therapy techniques, and therapeutic exercise techniques to manage impairments and functional limitations in patients. This course will stress an evidence based practice approach based for the selection and application of appropriate procedures. Clinical decision-making and goal setting will be practiced throughout.

GMAT 6211 Kinesiology (3 Credits)

GMAT 6221 Exercise Physiology, Nutrition (3 Credits)
This course presents both the normal and pathological human body responses to physiological conditions and processes in relationship to their influence on human performance. Emphasis is placed on the role of nutrition in human performance, as well as the study of muscle physiology, metabolism, cardiovascular and respiratory adaptations, aging, thermoregulation, strengthening, aerobic and anaerobic training and exercise prescription. Application of examination and evaluation procedures is provided through the use of selected human performance instruments.

GMAT 6231 Research Methods II (1 Credit)
This course provides students with the tools to collect and analyze data. Students will continue to analyze peerreviewed literature to improve critical thinking skills. Emphasis will be placed on concepts of authorship, data collection, data entry, data analysis and interpretation utilizing SPSS and Excel software programs.

GMAT 6241 Research Project II (1 Credit)
This course provides students with the tools to collect and analyze data. Students will also re-work the research proposal to improve skills in both writing and scholarship. Students work closely with mentors to collect data using the proposed methods from the research proposal. Students will also begin data entry and analysis.

GMAT 6251 Clinical Practicum II (2 Credits)
The students continue to develop clinical proficiency through the performance of selected athletic training skills with an athletic patient population. With the clinical instructor's direct supervision and instruction, the students begin to integrate the examination, evaluation, assessment, and intervention skills learned thus far in the curriculum. The seminar component will engage students in clinical problem-centered discussion providing integration of concepts of athletic training evaluation and management of musculoskeletal problems of the extremities and proper medical documentation.

GMAT 6999 Independent Study (1 Credit)

GMAT 7000 Seminar in Athletic Training (1 Credit)
This course is designed to review the academic competencies taught during the first year of the Seton Hall University MSAT Program. Students will review test taking skills and be given comprehensive exams to test their cumulative body of knowledge. In addition, there will be lectures on professional development and self-branding.

GMAT 7002 Practicum in AT III (2 Credits)

GMAT 7005 Biomedical Ethics (2 Credits)
The students will discuss the application of human personal and professional values, judgment, and choices to selective ethical dilemmas that arise in clinical practice. The course emphasis is on various traditional and contemporary approaches to normative ethics within decision making models, and applicable to resolving professional dilemmas in the delivery of health care.

GMAT 7010 General Medical Conditions (2 Credits)
This course will address general medical conditions commonly seen by the athletic trainer. Topics will be presented by a variety of medical professionals from the community. Students will demonstrate increasing competence in the examination, evaluation, management, prognosis, and intervention skills for general medical conditions in the physically active population. 2

GMAT 7015 Gen Medical Clinical Rotation (1 Credit)
This is a week-long immersive clinical experience in a non-orthopedic clinical setting. The immersive clinical experience will not only expose the athletic training students to a variety of non-orthopedic conditions but also to working in an inter-professional environment.

GMAT 7111 Orthopedic Clin Med - Imaging (3 Credits)
This course presents the theory and utilization of basic clinical imaging in the management of patients with various neuro-musculoskeletal, peripheral vascular, cardiopulmonary, and selected medical conditions. Along with an in depth overview of the orthopedic provider evaluation, treatment, and management of both acute and chronic musculoskeletal conditions as well as illness and degenerative conditions.

GMAT 7121 Targeted Appl Trt Extremeties (6 Credits)
This course emphasizes the use of advanced manual therapy techniques, therapeutic exercise techniques, and biophysical agents to manage impairments and functional limitations in patients with pre-existing, sub-acute, chronic/overuse and post-surgical conditions. This course will stress an evidence based practice approach based for the selection and application of appropriate procedures to manage impairments and functional limitations. Students will develop skill in musculoskeletal assessment and goal setting and will incorporate manual therapy techniques in conjunction with therapeutic exercise and biophysical modalities

GMAT 7131 Research Methods III (1 Credit)
This course provides students with the tools to interpret and discuss data findings. Students will continue to analyze peer-reviewed literature to improve critical thinking skills. Emphasis will be placed on concepts interpretation of data analysis findings, abstract and manuscript creation and submission. Also, students will apply concepts of research to Athletic Training clinical practice.

GMAT 7141 Research Project III (1 Credit)
This course provides students with the tools to analyze and present data. Students will work closely with the advisor to collect and analyze data using the proposed methods from the research proposal. In class, students will engage in peer-mentoring to develop effective research presentations. Outside of class, students will collect and analyze data, and prepare poster presentations.

GMAT 7151 Clinical Practicum III (2 Credits)
With a decrease in direct assistance from the clinical instructor, students will demonstrate more advanced techniques and increasing competence in the prevention, evaluation, and intervention of athletic injuries, illnesses and health-related conditions for an active patient population. The seminar component will help prepare students for the BOC examination by reviewing registration procedures and designing a study plan as well as skills related to job applications.

GMAT 7201 Inter-Professional Practice (1 Credit)
This course utilizes information gained through the IPE signature core workshops and continues via IPE modules to develop understanding, respect and foster communication among the healthcare professions.

GMAT 7211 Psychcosocial Issues in AT (2 Credits)
This course will serve as an introduction to the primary concepts of sport psychology for graduate students in Athletic Training and Counseling Psychology. The goal of this course is to provide participants insight into the importance of psychological theory and practice in athletic experience. Social, cognitive, affective and behavioral factors in athletic performance and participation will be covered. Topics will include: historical foundations of sport psychology, career transitions, confidence building, motivation, sport burnout, team dynamics, problem behaviors in athletics, performance enhancement techniques, psychology of athletic injury, and ethical issues.

GMAT 7221 Target Appl Treatment to Spine (3 Credits)
The management of musculoskeletal dysfunction is examined with emphasis on the development of analytical knowledge necessary to evaluate problems related to the spine. Normal musculoskeletal physiology of spinal joints is the basis for understanding pathophysiology and therapeutic intervention. A problem solving model for intervention of spinal joint dysfunction including medical screening, examination and goal setting will be stressed. Students will develop skill in manual therapy techniques and integration of these techniques with therapeutic exercise and physical modalities.

GMAT 7231 Pharmacology in AT (2 Credits)
Problem oriented approach to examining the most commonly used pharmacologic agents seen in Athletic Training practice. Basic principles of pharmacodynamics and pharmacokinetics, along with pertinent physiology are presented. Practical aspects of dosing schedules, therapeutic effects, interactions and adverse reactions emphasized, especially as they apply to physical performance and safety. Clinical decision making will be practiced throughout the course to develop appropriate strategies to educate the patient on the use of medications and performance-enhancing substances.

GMAT 7241 Healthcare Administration (2 Credits)
This course provides the student with an introduction to the local healthcare delivery system. Students learn the principles of administration and organization specific to the profession of athletic training.

GMAT 7251 Clinical Practicum IV (2 Credits)
With the clinical instructor providing approval, students will demonstrate competence and independence in the comprehensive management of athletic related injuries, illness and health-related conditions. The student will have the opportunity to develop competence in non-direct athletic patient care, including consulting, administration and clinical research. The seminar component will assist students in developing professional behaviors applicable to an entry level professional.

GMAT 7308 Practicum-Athletic Training IV (2 Credits)

GMAT 7401 Pract. in Athletic Training I (2 Credits)
This is the first of four clinical and seminar experiences. The students continue to develop clinical proficiency through the performance of selected athletic training skills with an athletic patient population. With the clinical instructor's direct supervision and instruction, the students begin to integrate the examination, evaluation, assessment, and intervention skills learned thus far in the curriculum. The seminar component will engage students in clinical problem-centered discussion providing integration of concepts of athletic training evaluation and management of musculoskeletal problems of the extremities and proper medical documentation. Pre-requisites: GMAT 6011 or ATFY 4011

GMAT 7402 Clinical Practicum II (2 Credits)
This course continues to build on preceding classroom and clinical experiences. With more of a guidance approach from the approved clinical instructor students will further develop clinical proficiency through performance of clinical skills .Students are required to observe health care professionals in a general medical setting as assigned by the program. The seminar component will engage students in concepts of organization and administration related to athletic training. Previous coursework will be reviewed and valuated by way of comprehensive exams. Prerequisites: GMAT 7400 (ATFY 4400).

GMHS 6010 Introductory to Epidemiology (3 Credits)

GMHS 6103 Principles-Lrng and Control (1 Credit)

GMHS 6110 Health Serv Iss and Trends (3 Credits)
An analysis of selected professional and policy issues affecting the present and projected healthcare delivery system. Issues concerning healthcare personnel, patients, healthcare technology, organizational structures and facilities, finance mechanisms and the role of government are stressed in relation to how they influence healthcare services and delivery. The course uses a blended instructional format by combining classroom instruction with virtual instruction.

GMHS 6113 Methods Stu Movement-Hum Perf (3 Credits)

GMHS 6140 Teaching in Health Profession (3 Credits)

GMHS 6210 Curric Devl in Health Prof (3 Credits)
An intensive study of the basic principles and procedures utilized in the development of health professional curricula, as well as the instruction implemented with the health care facility and community. Students will learn the principles of curricula plans and component parts, and will be engaged in developing evidence-based curricula addressing the current and projected needs of health care and professional education.

GMHS 6211 Inst Culture - Human Rela (3 Credits)
Communication challenges in the diverse clinical and educational areas are identified as opportunities for organizational enrichment. Issues related to cross-cultural communication and gender, age and other diversity issues are examined, with a focus on the interdisciplinary perspectives and the relevant psycho-social dynamics inherent to developing sound leadership and staff relations. The course uses a blended instructional format by combining classroom instruction with virtual instruction.

GMHS 6230 Leadership Theory-Practice (3 Credits)
This course focuses on understanding key leadership theories (1920-present) and how they are practiced, particularly in health care organizations; examining critical variables related to the expression of leadership, such as, power, motivation and influence, context, gender, culture, emotional intelligence, and, teamwork; exploring students' personal leadership capabilities through the use of assessment instruments, reflection, and feedback; and, planning leadership development activities. The course is organized as an action learning experience, with equal emphasis on reviewing concepts and engaging in activities in which learning emerges from acting, observing, and critically inquiring. The course uses a blended instructional format by combining classroom instruction with virtual instruction.

GMHS 6240 Mgmt-Ldrshp-Health Prof Ed (3 Credits)
This course challenges students to increase their knowledge and understanding of evidence-based management principles and practices, particularly in the four major functions of management (planning, organizing, leading and controlling), to expand their working knowledge of management terminology, and to explore key approaches and tools that managers utilize to influence organizational outcomes. The course uses a blended instructional format by combining classroom instruction with virtual instruction.

GMHS 6301 Topical Seminar (3 Credits)
Provides students the opportunity to participate in an in-depth, literature-based review of special topics. Integration of current information from research findings into clinical practice is a primary focus. Repeated enrollment is permitted when special topic is different.

GMHS 6302 Topical Seminar (3 Credits)
Provides students the opportunity to participate in an in-depth, literature-based reiview of special topics. Integration of current information from research findings into clinical practice is a primary focus. Repeated enrollment is permitted when special topic is different.

GMHS 6303 Topical Seminar (3 Credits)
Provides students the opportunity to partcipate in an in-depth, litterature-based review of special topics. Integration of current information from research findings into clinical practice is a primary focus. Repeated enrollment is permitted when special topic is different.

GMHS 6304 Topical Seminar (3 Credits)

GMHS 6307 Integrat Tech-Ed-Health Serv (3 Credits)
This course is designed for the healthcare professional/educator, and will expand one's capacity to integrate today's technology with teaching and learning strategies. An overview of the background on the technology's role in education as well as the issues concerning implementation will be explored. An interactive approach to understanding and utilizing various hardware and software products is provided. Topics: networks, the Internet, email, advanced word processing, imaging, CD-ROM and related multimedia, and other applicable healthcare/ research/education technologies. Students should be comfortable utilizing the computer, have access to the Internet and email, and be available to access SHU computers outside of class hours.

GMHS 6308 Topical Seminar (3 Credits)

GMHS 6310 Topical Seminar (3 Credits)

GMHS 6311 Topical Seminar (3 Credits)

GMHS 6409 Style Tchng-Lrng-Hlth Prof Ed (3 Credits)
Study of alternative relationships in the teaching-learning process. Course experiences will be guided by the "spectrum of teaching styles," a framework that delineates options in teaching and learning. Organizing students and subject matter; managing time, space and equipment; interacting with students; choosing verbal behavior; and creating cognitive connections with learners.

GMHS 6710 Clinical Medicine-Primary Care (3 Credits)

GMHS 7110 Strat Plan-Hlth-Care-Prof-Ed (3 Credits)
This course focuses on methods related to strategic planning in healthcare institutions and health professions education programs. The methods include planning, implementing and evaluating clinical or educational outcomes. The course uses a blended instructional format by combining classroom instruction with virtual instruction.

GMHS 7203 Issue-Motor Cntrl Gait-Balance (3 Credits)
The course has been designed to advance the practitioner's knowledge base and clinical decision-making skills in dealing with issues related to gait and lower extremity control. This course will examine: 1) contemporary theories of motor control as related to the acquisition, organization and control of locomotor skills; 2) changes in gait and lower extremity control across the lifespan; 3) effects of pathology on gait and lower extremity control; 4) qualitative and quantitative measures of gait; and 5) current treatement approaches used in rehabilitation. Literature from both clinical and experimental research provides the basis for classroom discussion designed to explore the implications of information for clinical practice.

GMHS 7204 Health Persp Topical Sem (3 Credits)
Provides students the opportunity to participate in an in-depth, literature-based review of special topics. Integration of current information from research findings into clinical practice is a primary focus. Repeated enrollment is permitted when special topic is different. 3 credits.

GMHS 7205 Issue-Motor Cntrl-Posture-Bal (3 Credits)

GMHS 7210 Health Care Marketing (3 Credits)

GMHS 7301 Investigatory Methods-Kinetics (3 Credits)

GMHS 7302 Intro Psychosoc-Study-Hum Mvmt (3 Credits)

GMHS 7304 Neuromotor Process-Brain-Behav (3 Credits)

GMHS 7305 Investigat Mthds-Biomechanics (3 Credits)

GMHS 7312 Independent Study (1 Credit)

GMHS 7315 Independent Study (2 Credits)

GMHS 7316 Independent Study (3 Credits)
This course provides the student with intensive study of a specialized area within the field of health sciences under the mentorship of a faculty member. Subject and credit hours will be arranged. Permission of departmental mentor is required.

GMHS 7318 Independent Study (3 Credits)
This course provides the student with intensive study of a specialized area within the field of health sciences under the mentorship of a faculty member. Subject and credit hours will be arranged. Permission of departmental mentor is required.

GMHS 7401 Pediatric Orthopedics (3 Credits)
This seminar encompasses an in-depth review of normal musculoskeletal development from infancy to late adolescence and the common mechanisms of injury, overuse and dysfunction. Select health and wellness topics, as well as medical and surgical procedures will be discussed with an emphasis on the application of various fitness and rehabilitation approaches.

GMHS 7403 Philosophy of Science (3 Credits)
The course emphasizes the important questions that define Philosophy of Science: an exploration of the way philosophers and scientists alter their world view as a consequence of scientific discoveries during the last two millenia. Initial readings present criteria for inclusion of any activity as scientific. The philosophical implications of induction and falsification theory as scientific methods will be explored. The nature and logic of scientific laws, theories and explanations, which are at the core of the scientific enterprise will be discussed and critically evaluated. Criteria for evaluating the truth of a theory will be explored and compared with the nature of a paradigm shift in science, as explicated by Kuhn, looking at how this interpretation redefined how changes in established scientific thinking occurs. Theoretical frames are introduced and how they provide a different yet related lens through which to view empirical data. Chaos and String Theories will be discussed and compared to all of the traditional scientific theories. The end result should be an appreciation of how this very abstract yet logically-based thought process prepares students to write in a graduate Ph.D. level program and cohesively integrate ideas together to form derived conclusions using traditional scientific form.

GMHS 7499 Doctoral Research Project II (3 Credits)

GMHS 7500 Interm Statistical Methods I (3 Credits)
Part I - Nature of statistics. This is the first part of a two-part course sequence. The following topics are covered: descriptive statistics, graphical methods, measures of central tendency and variability, probability, correlation and regression. The SPSS Statistical Analysis package will be used throughout the course.

GMHS 7501 Research Methods (3 Credits)
This course is designed to provide students with an introduction to research in health care. An overview of the research process will be provided, with an emphasis on how a research question is formulated based on a review of literature and identification of an appropriate theoretical framework. Quantitative research design strategies will be presented.

GMHS 7502 Qualitative/Survey Methods (3 Credits)
This course continues the introduction to research methods by focusing on qualitative research methods and survey research methods. In the qualitative section of the course, students will consider research elements that are unique to conducting qualitative research such as basic assumptions, sampling, data collection and analysis, and report writing. In the survey methods section of this course the primary focus is on development a survey instrument. Theoretical and practical issues related to the development, validation and implementation of research surveys will be addressed. Key issues include: question construction, questionnaire design, validating and piloting a new survey and survey data collection methods.

GMHS 7503 Scientific Inquiry/Writing (3 Credits)
This course is designed to provide students with a foundation in writing and communicating scientific information, and uses a blended instructional format by combining classroom instruction with virtual instruction. Various methods of scientific communication will be addressed, and students will gain practical experience in scientific writing.

GMHS 7505 Lgl Issues-Hlth Care-HPED (3 Credits)

GMHS 7506 Scientific Writing I (1 Credit)
This web-based course is designed to present methods of writing scientific papers, reviewing articles and dissemination of scientific findings.

GMHS 7508 Interm Statistical Methods II (3 Credits)
Part II - Nature of statistics. This is the second part of a two-part course sequence. The following topics are covered: sampling distributions, inferential statistics, estimation and hypothesis testing, tests of independence and nonparametric statistics. The SPSS Statistical Analysis package will be used throughout the course. Prerequisites: GMHS 7500

GMHS 7600 Current Iss-Health Prof Ed (3 Credits)
Academic administration and management is at the heart of every college and university. No institution of higher education can be better than its faculty, chairs, deans, provosts, administrative support staff and their ability to manage the work environment. Relying on the case study method, this course will consider topics such as academic tenure, faculty due process, role of the department chair compensation, professional development, financial management and policy formulation. 3 credits.

GMHS 7602 Research Seminar (3 Credits)
This course focuses on the application of qualitative and quantitative designs, particularly via critiques of published articles, the development of a hypothetical proposal and an IRB application and the role and scope of the Institutional Review Board. Prerequisites: GMHS 7500 Intermediate Statistics; GMHS 7508 Intermediate Statistical Methods II; GMHS 7501 Research Methods; GMHS 7502 Research Project I.

GMHS 7603 Biomedical Ethics-Legal Issues (3 Credits)
This course focuses on the disarray in healthcare based on four distinct themes: 1) malpractice/quality of care; 2) bioethics/individual autonomy; 3) public health/right of patients vs. state; and 4) financing/regulatory/ access to and cost of care. The course examines the conceptual whole and fundamental structural relationships while using the traditional themes of quality, ethics, access to and cost of care, while stressing three major themes; practitioner/patient relationships; state oversight of practitioners and patients; and institutional transactions and forms, all while keeping a focus on bioethics and health services research published in health policy literature to get a stronger empirical and theoretical base for exploring healthcare and healthcare law and the two fields¿ broad social impact where they overlap and compete for placement.

GMHS 7604 Survey Dsgn in Health Care (3 Credits)
The primary focus of this course is on the deveopment of a survey instrument. Theoretical and practical issues related to the development, validation and implementation of research surveys will be addressed. Key issues include: question construction, questionnaire design, validating and piloting a new survey and survey dta collection methods.
Prerequisites: GMHS 7501 (may be taken concurrently)

GMHS 7605 Qualitative Research Methods (3 Credits)
This course provides students with a theoretical and practical understanding of qualitative research methods. Drawing on several qualitative research traditions (e.g. case study, ethnography, grounded theory, phenomenology, biography...etc), students will consider how different modes of inquiry allow researchers to study things in their natural settings, and to attempt to interpret phenomena in terms of the meanings people bring to them. Key issues related to research design, such as data collection, analysis, and report writing, as well as, issues related to assessing the quality of a qualitative study will be addressed. Particular attention will be given to the application of qualitative research methods to health care issues. 3 credits.

GMHS 7606 Survey Design in Healthcare (3 Credits)

GMHS 8102 Movement Disorders-Pediatrics (3 Credits)

GMHS 8103 Effect Exerc-Nutr Dis Mgmt (3 Credits)

GMHS 8105 Qualitative Methodology (3 Credits)

GMHS 8109 Cort Aud Evoked Pot-Spec Proc (3 Credits)

GMHS 8113 Prin of Motor Cntrl -Learning (3 Credits)
This course will contain three major topics. The first topic will explore the historical and current theories of motor control. Specifically, topics related to the control processes and mechanisms of skilled movement will be addressed. The students will be introduced to the techniques currently available to measure movement including kinetics, kinematics and emg. In the second topic, students will learn about the variables that are most important for the learning of new movement behaviors. The third topic will explore issues related to the recovery of motor function such as neural plasticity, cortical reorganization and motor learning following brain damage. The student will have the opportunity to review the literature relevant to each of the topics and to observe and analyze the process and measure the outcome of a subject learning a novel motor skill.

GMHS 8114 PT Practice in Diverse Environ (3 Credits)

GMHS 8200 Topics-Artic-Phono Devl-Dis (3 Credits)
Intensive study of selected topics regarding the development of articulatory and phonological processes in children and the development, nature, and clinical management and disorders of articulation and phonology. Topics will vary according to student needs.

GMHS 8201 Topics in Dysphasia (3 Credits)
This advanced seminar course will address current topics related to the assessment and intervention of dysphagia in pediatric and adult populations.

GMHS 8204 Topics Neurogenic Disorders (3 Credits)
This advanced seminar course will address current topics related models of speech, language and cognition as it relates to impairments in children and adults with neurogenic disorders, and its impact on assessment and treatment.

GMHS 8206 Topics-Spch and Meth-Instruct (3 Credits)
Intensive review of, and practical exercises with, laboratory instrumentation for the analysis of acoustic and physiological characteristics of speech production. Topics may vary according to student needs

GMHS 8208 Topics in Speech Motor Control (3 Credits)
intensive study of selected topics regarding the neuromotor processes underlying normal speech production. Topics may vary according to student needs.

GMHS 8301 Neuroanatomy of the Swallow (3 Credits)

GMHS 8302 Anatom-Clin Cons Upper Extr (3 Credits)

GMHS 8304 Anatomic-Clin Consider Spin (3 Credits)

GMHS 8306 Clin Bio Mech in Movemnt Scien (3 Credits)

GMHS 8400 Gov Reg-Scien Inquiry-Grntshp (3 Credits)
Various grants funding agencies, search tools, and University resources are covered, with an emphasis on identifying appropriate granting sources. Basic principles of grantsmanship and scientific writing, and strategies to improve funding potential are reviewed. Students will review grants in mock study sections.

GMHS 8401 Physiolog-Responses-Disability (3 Credits)

GMHS 8505 Practicum (3 Credits)

GMHS 8506 Practicum (3 Credits)

GMHS 8507 Practicum (2 Credits)
Provides students the opportunity to integrate the goals of the program in a practical situation through the application of clinical or educational principles in a healthcare organization or institution of higher learning.

GMHS 8508 Practicum: Teaching Exper (3 Credits)
Provides students the opportunity to integrate the goals of the program in a practical situation through the application of clinical, administrative or educational principles in a healthcare organization or institution of higher learning. The type of practicum and facility assigned depends on the student's background and career goals. Prerequisite: Permission of instructor.

GMHS 8900 Autism in Review (3 Credits)

GMHS 8904 Genetics and Embryology (1 Credit)

GMHS 8907 Prevention and Wellness (1 Credit)

GMHS 9501 Dissertation Seminar I (3 Credits)
Seminar and discussion for doctoral candidates on the purpose, structure and content of the dissertation proposal. Areas emphasized include problem statements/hypotheses, review of the literature and selection and application of appropriate methods. Includes reviews and critiques of sample proposals, mock proposals, mock proposal hearings and candidate presentations of draft proposals. Prerequisite: candidacy status.

GMHS 9502 Dissertation Seminar II (3 Credits)
Colloquium for doctoral candidates in the final phases of dissertation preparation. The focus is on candidate-lead presentations covering various research designs and data analyses techniques, with an emphasis on critical analysis of findings and conclusions. Prerequisites: completion of GMHS-9501, approval of dissertation proposal, and in progress with dissertation data collection.

GMHS 9504 Dissertation I (4 Credits)
Working with the committee, the student develops his/her study proposal. Areas emphasized include review of the literature, identification of problem statements/research question(s)/hypotheses, selection and application of appropriate methods, conducting a pilot study and consideration of protection of human subjects/IRB requirements. Includes reviews and critiques of sample proposals, mock proposal hearings and candidate presentations of draft proposals. This course culminates in the dissertation proposal hearing.

GMHS 9505 Dissertation II (4 Credits)
Working with the committee, the student conducts participant recruitment, data collection, analysis of the data and an initial draft of the study's findings.
Prerequisites: GMHS 9504 (may be taken concurrently)

GMHS 9506 Dissertation Advisement (4 Credits)
The candidate will submit a completed dissertation and successfully orally defend the dissertation in a public forum. Candidates must adhere to all dissertation guidelines as specified by the program.
Prerequisites: GMHS 9505 (may be taken concurrently)

GMHS 9507 Dissertation Extension Advisement (2 Credits)
GMHS 9507 is used on a need basis, to fill a gap the faculty has observed with some doctoral students' ability to effectively complete the deliverables set for the three program dissertation courses within the semester timeframe allocated (GMHS 9504, 9505, 9506). Students can choose to complete the outstanding dissertation deliverables without faculty additional support students and sign up for Doctoral Thesis Continuation THCN8999AA – (CRN#) or Doctoral Thesis Continuation THCN9000AA – (CRN#) which enables students to maintain an active registered status until the deliverables are completed. However, if students are seeking faculty mentorship to successfully meet the deliverables beyond the 4-credit allocation, students then will be required to sign up for GMHS 9507 for 2 credits until the deliverables have been received. Students who do not complete the required deliverables for Dissertation 1, 11, or the Advisement course as outlined in the course syllabus are required to sign up for GMHS 9507 DEA if they would like to receive faculty mentorship until the deliverables have been accepted by the course instructor (dissertation chair). The deliverables for DEA course are based upon outstanding deliverables from dissertation 1, 11, or advisement coursework, with due dates being determined between the student and faculty mentor. IMPORTANT: DEA course requires independent student learning, with minimal instructor input, at the initiation of the course to develop and agree to the study plan, mid-way to assess progress and, at the end of the course to critique the final deliverables. The deliverables coincide with the remaining deliverables the student did not complete in the associated Dissertation course but in the individualized study plan the faculty will employ a flipped learning scaffolded approach to promote individualized progress. DEA course will meet monthly on the first Weds of each month during the semester to learn with and from all students in the course and faculty by sharing progress and outcome deliverables. In addition, it is expected that students will meet with their dissertation chair weekly on an as-needed basis. Prerequisite: Permission of Instructor and /or Advisor is required. GMHS 9507 may be taken multiple times for credit.

GMOT 6050 Interprof Training Specific LD (0 Credits)
The Project Write to Learn offers an implementation science educational sequence comprised of five units designed for program scholars to gain knowledge, understanding, and experience for the provision of integrated services for improving written expression in children with Specific Learning Disabilities.

GMOT 6055 Prjct Transition Children ASD (0 Credits)

GMOT 6100 Professional Formation I (2 Credits)
This course focuses on the acquisition of professional knowledge and skills expected of graduate students in a professional program.

GMOT 6155 Fnctnl Anatomy-Kinesiology I (4 Credits)
This course focuses on understanding and analyzing typical and atypical human movement across the life span using anatomy and kinesiology principles. This course includes labs.

GMOT 6160 Neuroscience for Occ Therapy (2 Credits)
This course covers body functions and structures of the nervous system, including the impact of impairment on activity and participation.

GMOT 6170 Occup Therapy Practice Skills (2 Credits)
This course introduces basic health assessment; client and provider safety; and demonstration and integration of occupational therapy practice skills. This course includes labs.

GMOT 6185 Intro to Occupational Therapy (4 Credits)
This course introduces the students to the foundations of the occupational therapy profession. This course includes labs.

GMOT 6200 Professional Formation II (2 Credits)
This course develops critical thinking and clinical reasoning skills for occupational therapy practice.

GMOT 6231 Selected Topics in OT (2 Credits)

GMOT 6240 Fnctnl Anatomy Kinesiology II (2 Credits)
This course continues to focus on understanding and analyzing typical and atypical human movements across the life span using anatomy and kinesiology principles. This course includes labs.

GMOT 6250 Group Process in Occup Therapy (4 Credits)
This course integrates theories of group dynamics and leadership with the development and implementation of functional activity-based groups. This course includes fieldwork I experiences.

GMOT 6260 Cognition Percep Vision -Funct (3 Credits)
This course addresses cognition, perception, and visual impairments; their impact on function; and principles of related occupational therapy assessments and interventions. This course includes labs.

GMOT 6270 Occupational Therapy Process (4 Credits)
This course introduces the principles and implementation of the occupational therapy process.

GMOT 6301 Hlth Med Complex Older Adult (2 Credits)
This course examines common health conditions associated with older adults and how impairment impacts activity and participation.

GMOT 6303 Evaluation of Older Adults (2 Credits)
This course focuses on the evaluation and assessment of older adults.

GMOT 6305 Intervention for Older Adults (4 Credits)
This course integrates theories and interventions for occupational therapy practice with older adults. This course includes labs and fieldwork I experiences.

GMOT 6520 Adult Rehab In OT I (3 Credits)

GMOT 6600 Orientation to Occupational Therapy Domain & Process (3 Credits)
This course addresses foundational concepts within the field of occupational therapy, focusing on contemporary practice.

GMOT 6605 Functional Anatomy and Kinesiology for Occupational Centered Practice (2 Credits)
This course develops students' ability to associate functional human anatomy, movement analysis, and occupational performance.

GMOT 6610 Functional Anatomy and Kinesiology for Occupational Centered Practice Lab (2 Credits)

GMOT 6615 Neuroscience and Functional Cognition for Occupational Centered Practice (3 Credits)
This course provides foundational knowledge of neuroanatomy in relationship to functional cognition, vision, perception, and occupation across the lifespan.

GMOT 6620 Occupational Therapy Reasoning and Practice Skills (2 Credits)
This course provides foundational knowledge of theory, clinical-reasoning, and clinical skills for occupational centered practice the lifespan.

GMOT 6625 Occupational Therapy Practice Skills and Reasoning (2 Credits)
This course addresses clinical reasoning, activity analysis, and the skills required for occupational centered practice across the lifespan.

GMOT 6630 Principles for Evidence Informed Practice I (1 Credit)
This course addresses the use of research to inform clinical practice.

GMOT 6635 Assessments for Occupational Centered Practice with Adults (3 Credits)
This course focuses on the selection, administration, scoring, and interpretation of assessments for adult occupation centered practice.
Prerequisites: GMOT 6600 with a minimum grade of D and GMOT 6605 with a minimum grade of D and GMOT 6610 with a minimum grade of D and GMOT 6615 with a minimum grade of D and GMOT 6620 with a minimum grade of D and GMOT 6625 with a minimum grade of D and GMOT 6630 with a minimum grade of D and GMOT 6650 with a minimum grade of D

GMOT 6640 Occupational Centered Practice for Adults with Orthopedic Conditions (3 Credits)

GMOT 6645 Occupational Centered Practice for Adults with Neurologic Conditions (2 Credits)
This course focuses on evaluation and intervention of common neurologic conditions in the adult population.
Prerequisites: GMOT 6600 with a minimum grade of C and GMOT 6605 with a minimum grade of C and GMOT 6610 with a minimum grade of C and GMOT 6615 with a minimum grade of C and GMOT 6620 with a minimum grade of C and GMOT 6625 with a minimum grade of C and GMOT 6630 with a minimum grade of C and GMOT 6650 with a minimum grade of C

GMOT 6650 Occupational Justice (2 Credits)
This course addresses occupational justice, diversity, equity, and inclusion in the field of occupational therapy.

GMOT 6655 Occupational Centered Practice for Adults: Integrative Experiential Seminar (1 Credit)
This experiential seminar integrates and relates knowledge of adult theory, assessment, and interventions for occupational centered practice at the individual, group, and population levels.
Prerequisites: GMOT 6600 with a minimum grade of C and GMOT 6605 with a minimum grade of C and GMOT 6610 with a minimum grade of C and GMOT 6615 with a minimum grade of C and GMOT 6620 with a minimum grade of C and GMOT 6625 with a minimum grade of C and GMOT 6630 with a minimum grade of C and GMOT 6650 with a minimum grade of C

GMOT 6660 Occupational Centered Practice for Mental Health across the Lifespan (2 Credits)

GMOT 6665 Group Process for Occupational Centered Practice (2 Credits)
This course teaches students to create and apply the skills of therapeutic use of self, group leadership, and group dynamics.
Prerequisites: GMOT 6600 with a minimum grade of C and GMOT 6605 with a minimum grade of C and GMOT 6610 with a minimum grade of C and GMOT 6615 with a minimum grade of C and GMOT 6620 with a minimum grade of C and GMOT 6625 with a minimum grade of C and GMOT 6630 with a minimum grade of C and GMOT 6650 with a minimum grade of C

GMOT 6670 Fieldwork level I: Rehabilitation (1 Credit)
This fieldwork experience complements occupational centered practice for adults with neuro/ortho conditions.
Prerequisites: GMOT 6600 with a minimum grade of C and GMOT 6605 with a minimum grade of C and GMOT 6610 with a minimum grade of C and GMOT 6615 with a minimum grade of C and GMOT 6620 with a minimum grade of C and GMOT 6625 with a minimum grade of C and GMOT 6630 with a minimum grade of C and GMOT 6650 with a minimum grade of C

GMOT 6675 Occupational Centered Practice for Adults with Neurologic Conditions - Lab (1 Credit)

GMOT 6700 Professional Formation III (2 Credits)
This course continues to develop clinical reasoning, clinical integration and evidence-based practice. This course includes service learning experiences.

GMOT 6750 Health Med Complexities Adults (2 Credits)
This course examines common health conditions associated with adults and how impairment impacts activity and participation.

GMOT 6760 Evaluation of Adults (2 Credits)
This course focuses on the evaluation and assessment of adults.

GMOT 6770 Intervention for Adults (6 Credits)
This course integrates theories and interventions for occupational therapy practice with adults. This course includes labs and fieldwork I experiences.

GMOT 6780 Prof Ethics in Occup Therapy (2 Credits)
This course introduces principles of ethics and law for occupational therapy practice.

GMOT 6800 Professional Formation IV (2 Credits)
This course advances clinical reasoning and knowledge of#culturally responsive service delivery when collaborating with diverse clients.

GMOT 6850 Hlth Med Complex Children Adol (2 Credits)
This course examines common health conditions associated with children and adolescents and how impairment impacts activity and participation.

GMOT 6860 Evaluation Children Adolescent (2 Credits)
This course focuses on the evaluation and assessment of children and adolescents.

GMOT 6870 Intervention for Children Adol (5 Credits)
This course integrates theories and interventions for occupational therapy practice with children and adolescents. This course includes labs and fieldwork I experiences.

GMOT 6880 Wellness - Entrepreneurship I (3 Credits)
This#first of a two-course#sequence#examines emerging occupational therapy practices, program development, and research in practice. This course includes#preparation for the#service learning and/or capstone project.

GMOT 6960 Health Care Policies Organiz (3 Credits)

GMOT 6965 Health Care Policies - Organ (2 Credits)
This course addresses the practice and management of occupational therapy services across healthcare, education and community environments.

GMOT 6970 Fieldwork Preparation (1 Credit)
This course addresses expectations, trends and issues in the clinical environment to facilitate successful performance in level II fieldwork.

GMOT 6980 Wellness - Entrepreneurship II (4 Credits)
This course continues with the application#and community delivery#of service learning/capstone projects developed in Wellness and Health Promotion I.

GMOT 7000 Professional Formation V (1 Credit)
This course focuses on transitioning into professional roles and continued professional development as practitioners and managers.

GMOT 7013 Fieldwork Level II-Phase I (3 Credits)
The Level II Fieldwork course requires students to integrate the roles of practitioner, contributor, and manager in a clinical setting. Time spent in clinical setting is equivalent to a full-time job.

GMOT 7022 Fldwrk Lvl II - Phase II - opt (2 Credits)

GMOT 7023 Fieldwork Level II, Phase II (3 Credits)
The Level II Fieldwork course requires students to integrate the roles of practitioner, contributor, and manager in a clinical setting. Time spent in clinical setting is equivalent to a full-time job.

GMOT 7033 Fieldwork Level II, Phase III (3 Credits)
This optional Level II Fieldwork course requires students to integrate the roles of practitioner, contributor, and manager in an additional area. Time spent in clinical setting is equivalent to a full-time job.

GMOT 7303 Research Methods I (3 Credits)
This course addresses the use of quantitative methods to inform clinical practice and research.

GMOT 7310 Research Methods I (2 Credits)

GMOT 7320 Research Methods II (2 Credits)
This course continues to address research for and in practice.
Prerequisites: (GMOT 7303 with a minimum grade of C or OTFY 4303 with a minimum grade of C)

GMOT 7510 Sem in Adv Theory-Pract (3 Credits)

GMOT 7600 Occupational Therapy Leadership and Management (2 Credits)
This course addresses the practice, management, and leadership of occupational therapy services across healthcare, education, and community settings.

GMOT 7605 Wellness and Health Promotion for Occupational Centered Practice (3 Credits)
This course addresses participation and engagement within clinical and community environments with an emphasis on prevention, wellness, health promotion, education, and advocacy.

GMOT 7610 Assistive Technology of Occupational Centered Practice (2 Credits)
This course addresses the selection and application of assistive technologies in occupation-centered practice across the lifespan.

GMOT 7615 Development and Context for Pediatric Occupational Centered Practice (1 Credit)
This course addresses typical occupational engagement over the course of childhood and adolescence, as well as contextual factors influencing pediatric practice.

GMOT 7620 Fieldwork Level I: Behavioral health, Community health, Mental health (1 Credit)
This fieldwork experience complements occupational centered practice for behavioral health, community health, or mental health.

GMOT 7625 Professional Transition and Interprofessional Practice (2 Credits)
This course focuses on creating and implementing a professional development plan to address the transition to clinical practice.

GMOT 7630 Occupational Centered Practice for Pediatrics (1 Credit)
This course addresses the ability of students to plan and carry out the OT process with children.

GMOT 7635 Occupational Centered Practice I: Infants and Children (3 Credits)
This course focuses on evaluation and intervention of infants, toddlers, and children in clinical, educational, and community-centered settings.

GMOT 7640 Occupational Centered Practice II: Adolescents (2 Credits)
Students will learn to evaluate, develop interventions for, and carry out interventions for adolescents.

GMOT 7645 Level I fieldwork: Pediatrics (1 Credit)
This fieldwork experience complements occupational centered practice for children and adolescents.

GMOT 7650 Principles for Evidence Informed Practice II (2 Credits)
This course will address the ethical and practical application of research methods to solve clinical problems.

GMOT 7655 The Reflective Practitioner (2 Credits)
This course focuses on advanced therapeutic use of self and communication to support clinical practice.

GMPA 6001 Human Anatomy (4 Credits)
Instruction in significant aspects of human anatomy with respect to PA practice. Lecture instruction as well as dissection in cadaver lab are methods used to convey material. Clinical application of anatomic structure and function are emphasized.

GMPA 6104 Psychiatry (2 Credits)
An overview of psychiatric concepts and an introductory approach to the evaluation of patients with mental and behavioral problems. Includes the various psychiatric syndromes, in terms of causal factors, clinical presentation, diagnosis, treatment and prognosis. The impact that psychological problems have on the total health care of the patient will be emphasized.

GMPA 6105 Professional Seminar I (2 Credits)
Prepares students with tools to address comprehensive sociologic issues related to healthcare needs of diverse populations, respectful accommodation of beliefs related to healthcare, and enhanced communication skills to establish connection and trust. Diversity topics in this course in relation to compassionate healthcare include ethnicity/race, religion/spirituality, social determinants of health (socioeconomic status, education, neighborhood and physical environment, employment, and social support networks, as well as access to health care). A standardized patient event of breaking bad news to patients combines topic knowledge, patient communication, and empathy skills. This course will also be a platform to explore the historical development of the Physician Assistant profession, and our role in the healthcare system. Additionally, introductory ethical concerns related to graduate studies will be disseminated, including topics such as intellectual honesty, academic integrity, professional conduct, and essential study skills.

GMPA 6106 Electrocardiography (2 Credits)
Introduction to analysis of the electrocardiogram. The course will review cardiac electrophysiology and indications for ECG testing. Students will learn how to perform a 12 lead ECG as well as how to analyze an ECG for rate, rhythm, axis, intervals, cardiac hypertrophy and ischemia/infarction.

GMPA 6107 Pathophysiology (3 Credits)
Building upon the foundation provided in GMPA6111/PAFY4111, this course provides an in-depth study of the pathophysiologic changes which occur in the body in response to disease and injury. The course discusses how pathologic changes noted at both the cellular and organ system levels alter homeostasis. Correlation to the clinical aspect of disease is emphasized.

GMPA 6111 Human Physiology (3 Credits)
An in-depth exploration of the physiologic aspects of homeostasis at both the cellular and organ system levels. Topics include the cell, musculoskeletal, cardiac, pulmonary, digestive, renal, endocrine, and reproductive systems. Open to physician assistant majors only.

GMPA 6113 Neuroscience (3 Credits)
Covers the basic structure, organization, and function of the central nervous system (CNS). Lectures focus on understanding localization of function within specific structures and pathways of the brain and spinal cord, and typical syndromes associated with vascular accidents, trauma or diseases of the various parts of the CNS.

GMPA 6114 Pharmacology I (2 Credits)
Develops skills related to the principles of pharmacology as they pertain to therapeutic agents, prescription, and non-prescription medications. The pharmacology and therapeutic properties of commonly prescribed medications will be a focus of the pharmacology courses. Discussion will include the principal mechanisms of action of major classes of therapeutic agents, understanding of pharmacokinetics and pharmacodynamics, indications, side effects, contraindications, drug interactions, monitoring, and clinical use.

GMPA 6115 Pharmacology II (2 Credits)
Building on Pharmacology I, develops skills related to the principles of pharmacology as they pertain to therapeutic agents, prescription, and non-prescription medications. Discussion will include the principal mechanisms of action of the major classes of therapeutic agents, understanding of pharmacokinetics and pharmacodynamics, indications, side effects, contraindications, drug interactions, monitoring, and clinical use.
Prerequisites: GMPA 6114 with a minimum grade of C

GMPA 6203 Intro Clinical Medicine I (4 Credits)
Provides first-year Physician Assistant (PA) students with a comprehensive foundation in history-taking, physical examination techniques, clinical documentation, and patient-centered communication, emphasizing the development of systematic assessment skills essential for effective diagnosis and medical decision-making. The course integrates lectures, small-group discussions, laboratory-based skill sessions, standardized patient (SP) encounters, and simulation exercises to enhance students' ability to elicit comprehensive medical histories, perform structured physical examinations across all major organ systems, and apply patient-centered interviewing techniques across the lifespan, including prenatal, infant, pediatric, adolescent, teen, adult, and geriatric populations. Students will develop active listening skills, effective questioning techniques, and nonverbal communication awareness, ensuring empathetic, unbiased interactions with diverse patients while learning to identify and address barriers to communication. Through structured lab-based practice, peer-to-peer assessments, and faculty-guided feedback, students refine their technique proficiency in inspection, palpation, percussion, and auscultation while becoming proficient in accurate measurement of vital signs, systematic review of systems, and identifying key clinical findings. The course also introduces principles of medical documentation, ensuring students develop the ability to construct clear, concise, and organized patient records using appropriate medical terminology, distinguishing between subjective and objective data while reinforcing the importance of thorough, legally sound documentation in clinical practice. Assessment methods include written exams, practical evaluations, objective structured clinical examinations (OSCEs), and structured history and physical (H&P) assignments, all designed to ensure mastery of fundamental clinical competencies. By the end of the course, students will demonstrate proficiency in conducting full and focused patient assessments, synthesizing pertinent clinical information, and effectively communicating findings, laying the groundwork for more advanced clinical reasoning and patient care responsibilities in future coursework and supervised clinical practice.

GMPA 6205 Intro to Clinical Medicine II (4 Credits)
Building upon the foundational skills developed in Introduction to Clinical Medicine I, this course advances students' competencies in comprehensive history-taking, physical examination, and clinical reasoning, ensuring a seamless progression toward higher-level patient care and clinical decision-making. Students will refine their ability to perform focused patient assessments, identify key clinical findings, and develop evidence-based differential diagnoses that reflect a deep understanding of pathophysiology and patient presentation patterns. Through a dynamic curriculum incorporating interactive lectures, team-based learning activities, case-based discussions, and standardized patient (SP) encounters, students will enhance their proficiency in integrating medical knowledge with hands-on clinical skills while reinforcing critical thinking, problem-solving, and decision-making in real-world patient care scenarios. Special emphasis is placed on problem-focused assessments, clinical prioritization, and effective communication strategies to establish rapport, trust, and shared decision-making with patients across diverse populations, including those with complex medical and psychosocial needs. The course also introduces advanced documentation practices, incorporating structured medical decision-making, diagnostic formulation, and clinical reasoning frameworks to improve accuracy, efficiency, and clarity in patient records. Students will gain experience in constructing well-organized medical documentation, formulating concise yet comprehensive differential diagnoses, and effectively communicating findings in both written and verbal formats to facilitate collaboration within the healthcare team. Additional focus is placed on the application of evidence-based medicine, clinical guidelines, and decision-support tools to reinforce best practices in diagnostic accuracy and treatment planning. As students progress through increasingly complex patient encounters, they will develop the ability to synthesize multiple clinical data points, recognize subtle disease presentations, and anticipate potential complications, thereby strengthening their ability to eventually formulate appropriate management plans. By fostering adaptability, and ethical decision-making, this course ensures that students develop the communication skills and professional demeanor necessary for high-quality, patient-centered care. Ultimately, students will demonstrate readiness for more complex clinical encounters and a smooth transition to supervised clinical practice, where they will apply their refined skills in diverse medical settings, working alongside interprofessional teams to deliver safe, effective, and compassionate healthcare.

GMPA 6206 Electrocardiography (1 Credit)

GMPA 6208 Laboratory Diagnostics (2 Credits)
Introduction to laboratory diagnostic testing. The course will review indications for testing, normal results, and common pathologic findings discovered in testing blood, urine, stool, cerebrospinal fluid, synovial fluid and other body fluids. Students will have the opportunity to practice laboratory procedures including phlebotomy, urinalysis and guaiac testing for occult blood.

GMPA 6209 Diagnostic Imaging (2 Credits)
Introduction to diagnostic imaging. Following an introduction to different imaging modalities and their indications, the course will progress through an organ-system based review of normal radiographic anatomy and pathologic findings.

GMPA 6305 Professional Seminar 2 (2 Credits)
Develops skills needed for success in research focusing#on an introduction to evidence based medicine. Instruction will be provided on how to write a PICO question as well as how to search the medical literature. This course explores the molecular basis of genetics, inheritance patterns, and genetic disorders. Students will analyze family pedigrees, recognize signs of genetic disease, evaluate genetic testing options, and discuss the ethical and legal implications of genetics in clinical practice. Include material related to the historical development of the PA profession and PA professional organizations.

GMPA 7305 Professional Seminar 3 (2 Credits)
Builds upon Professional Seminar 1 to refine the clinical, ethical, and communication skills of second-year Physician Assistant (PA) students as they prepare for clinical rotations and professional practice. This course builds upon previous competencies by integrating lectures, case-based discussions, standardized patient (SP) simulations, and experiential learning, enabling students to apply medical knowledge to complex patient interactions while reinforcing bias mitigation, stereotype reduction, and ethical decision-making. A key focus is the exploration of diverse healthcare challenges, including LGBTQIA + healthcare, gender dysphoria, gender-affirming care, sex positivity, sexual history interviewing, and care for victims of sexual assault, domestic violence, child and elder abuse, ensuring that students develop a holistic, trauma-informed approach to sensitive medical concerns. Additional topics include intellectual and developmental disabilities, aphasia, chronic disease management, end-of-life care, and substance use disorders, all of which require advanced clinical reasoning, patient-centered communication, and multidisciplinary collaboration. Through interactive workshops and simulation-based training, students practice engaging with patients who present challenging personalities, emotional distress, or complex psychosocial needs, strengthening their ability to navigate high-stakes, ethically challenging, or emotionally charged clinical scenarios. A group project on the Americans with Disabilities Act (ADA) encourages students to research, collaborate, and present on key legislation, accessibility standards, and the impact of disability rights on healthcare delivery, further reinforcing the importance of patient advocacy and equitable care. Students will also implement the community service project developed in Professional Seminar 1, applying their leadership, teamwork, and outreach skills to address health disparities and promote health equity in underserved populations. The course concludes with structured preparation for clinical rotations, emphasizing professionalism, ethical integrity, emotional resilience, and confidence in patient care settings, while also focusing on self-awareness, adaptability, and assertiveness in medical environments. By reinforcing critical thinking, interdisciplinary collaboration, and patient advocacy, Professional Seminar 3 ensures that students graduate with the competence, confidence, and ethical foundation necessary for delivering equitable, compassionate, and effective healthcare, ultimately preparing them for the complexities of modern clinical practice and lifelong professional development.

GMPA 7312 Fundamentals Clinical Medicine (8 Credits)
Provides a comprehensive systems-based overview of various disease entities in preparation for clinical rotations. Students will gain in-depth knowledge of the etiology, clinical presentation, differential diagnosis, diagnostic and therapeutic approach to diseases processes. The specialties of internal medicine, surgery, pediatrics, and obstetrics and gynecology are addressed among others.

GMPA 7314 Intro Clinical Medicine III (4 Credits)
Builds on the clinical skills of history-taking, physical exam and development of differential diagnoses that have been gained in Introduction to Clinical Medicine 1 & 2. This semester students transition to higher-level patient care by developing their skills in medical decision making by using their differential diagnoses to guide next clinical steps in patient care including selecting appropriate diagnostic studies and treatments. Students will learn to interpret imaging and laboratory results to then create definitive clinical assessments and medical management plans which include clinical therapeutics, additional diagnostics, recognition of when specialist referrals are necessary, health maintenance recommendations, patient education and follow-up. In addition, the course will incorporate training in common primary care procedural skills throughout the semester.

GMPA 7404 Research Methods I (2 Credits)
Provides#an overview of research for#PAs#and introduces fundamental skills required for research in the health professions.#Students will further their understanding of how to search the medical literature. By the end of the Research sequence of courses, students will complete a Research project, a Quality Improvement Project or a Case Study.#In some cases, students#may#join an ongoing project.#Student projects/cases studies may be started during the Research Methods I course and will continue in Research Methods II and Research Methods III.#If applicable,#IRB application(s)#may be initiated during Research Methods I.

GMPA 7405 Professional Seminar 4 (2 Credits)
An organ-systems based review course. This course will also address coding and billing, public health systems, quality improvement, risk management, cost-effective care, and HIPAA.

GMPA 8000 Internal Medicine Rotation (4 Credits)
Required supervised clinical practice experience in internal medicine.

GMPA 8001 Surgery Rotation (4 Credits)
Required supervised clinical practice experience in surgery.

GMPA 8003 Obstetrics and Gyn Rotation (2 Credits)
Required supervised clinical practice experience in obstetrics and gynecology.

GMPA 8004 Behavioral/MentalHlth Rotation (2 Credits)
Required supervised clinical practice experience in behavioral and mental health.

GMPA 8005 Outpatient Medicine I Rotation (2 Credits)
Required supervised clinical practice experience in outpatient medicine.

GMPA 8006 Outpatient Medicine 2 Rotation (2 Credits)
Required supervised clinical practice experience in outpatient medicine.

GMPA 8007 Family Medicine (2 Credits)
Required supervised clinical practice experience in family medicine.

GMPA 8009 Emergency Medicine Rotation (2 Credits)
Required supervised clinical practice experience in emergency medicine.

GMPA 8010 Elective Rotation 1 (2 Credits)
Required elective supervised clinical practice experiences.

GMPA 8011 Elective Rotation 2 (2 Credits)
Required elective supervised clinical practice experiences.

GMPA 8012 Elective Rotation 3 (2 Credits)
Additional elective supervised clinical practice experience.

GMPA 8013 Elective Rotation 4 (2 Credits)
Additional elective supervised clinical practice experience.

GMPA 8014 Elective Rotation 5 (2 Credits)
Additional elective supervised clinical practice experience.

GMPA 8015 Underserved Population Hlthcre (2 Credits)
Clinical experience providing an overview of underserved population healthcare. The course explores medical and social issues which foster cultural agility relative to underrepresented communities. Following the completion of required preparatory coursework, students rotate in a medically underserved environment. Course content encourages critical introspection and exploration of contributions students can provide to enhance underserved population health initiatives.

GMPA 8016 Pediatrics Rotation (2 Credits)
Required supervised clinical practice experience in pediatrics.

GMPA 8509 Research Methods II (1 Credit)
This course will continue to develop the fundamental skills required for research in the health professions. Methods of data collection and analysis will be explored.

GMPA 8510 Biostatistics (2 Credits)
Introduction to statistical research methods in health science as applied to study of distribution of disease in human population. The course is intended to develop students' competencies in the application of the statistical techniques used to explore, describe, and analyze information for research or evaluation purposes. Topics include hypotheses testing, t-tests, analysis of variance, linear correlation and regression, nonparametric tests, and power analysis. An introduction to statistical software is included.

GMPA 8512 Research Methods III (2 Credits)
The research process will culminate with a full analysis of data collected. Students will draw a conclusion using appropriate qualitative or quantitative analytic techniques. Students will present their research to peers, faculty and/or clinicians through various media, including a presentation poster. This course is a hybrid course requiring online participation and attendance at class sessions.

GMPA 8515 Professional Seminar 5 (2 Credits)
An ongoing organ-system based review course, also addresses patient safety, prevention of medical errors, quality improvement and risk management.

GMPA 8603 Health Care Policy (2 Credits)
An overview of the health care industry and policies with information regarding the various topics related to the US health care delivery system. The impact that health care policy and managed care has on the total health of a patient will be discussed. The course is given in the Spring semester of the third professional year so that the student can incorporate clinical skills with an analytic perspective on those issues that drive the current health care system.

GMPA 8604 Biomedical Ethics (2 Credits)
The application of human and professional values, judgments and choices to selective ethical dilemmas that arise in practice. Emphasis will be placed upon various traditional and contemporary approaches to normative ethics within decision making models applicable to resolving professional dilemmas in the delivery of health care. Open to physician assistant majors only or permission by department chair.

GMPA 8605 Epidemiology (2 Credits)
An introduction to the basic epidemiologic strategies and thinking. Epidemiologic sophistication fosters a questioning attitude; without it, medical practices may be introduced and accepted even though they lack adequate support from well-controlled studies. Students will be exposed to the variations that characterize acute/infectious and chronic disease epidemiology. Implications for primary care practitioners will be emphasized.

GMPA 8615 Professional Seminar 6 (2 Credits)
An ongoing organ-system based review course. The course also prepares students for the transition to practice by covering PA practice statutes, credentialing, contract negotiation and malpractice. The course culminates in summative assessments of clinical knowledge, skills and professionalism.

GMPA 8999 Independent Study (1 Credit)
Independent study provided under the supervision of a faculty member to foster student understanding and experience in alignment with MS – Physician Assistant program goals. Subject matter and meeting hours will be arranged on an individual basis. Departmental permission is required.

GMSL 6007 Physiolog-Acoustic Phonetics (3 Credits)
This course addresses physiological aspects of the ventilatory, laryngeal, supralaryngeal, and orofacial mechanism as it relates to normal speech production. The acquisition and analysis of aerodynamic and acoustic aspects of voice and speech will be reviewed along with its application to disordered speech assessment.

GMSL 6009 Diagnostic Clinical Principles (2 Credits)
This course focuses on assessment in communication disorders as a problem-solving process. Students will develop knowledge and skill competencies in selection, administration, and analysis of testing materials as well as writing and interpreting clinical notes and reports for pediatric populations. The course will also cover review of policies, procedures, expectations, and professional behavior in the clinical environment.

GMSL 6010 Child Lang Dev and Disorders (4 Credits)
This course is an advanced study of the relationship between language development, cognitive development, and language impairment in pediatric populations from birth to five years of age. First, the course begins by giving the student a solid footing in typical developmental milestones as well as current theories of language development and disorders. Second, populations of children who demonstrate language impairment, including late talkers, Autism Spectrum Disorder, Down syndrome, and Preschool Language Impairment/Specific Language Impairment are explored. Third, the importance of the assessment process in determining a diagnosis, a prognosis, and recommendations for intervention are emphasized. Finally, setting of appropriate language goals and scaffolding of language performance in treatment sessions. Students will gain an understanding of how language development within culturally and linguistically diverse backgrounds differs from language impairment. Students will become familiar with ASHA standards, ethics and scope of practice as it relates to language impairment and working with individuals from diverse cultural and language backgrounds.

GMSL 6011 Articulation and Phonology (3 Credits)
This course provides a strong foundation in the typical development of speech intelligibility and the knowledge and skills needed to assess and treat children with speech intelligibility disorders. Students will learn the developmental milestones related to speech intelligibility development and undergo a review of the normal anatomical and physiological process for producing intelligible speech and review IPA transcription. Students will expand their knowledge of the assessment, diagnostic and treatment aspects of pediatric speech intelligibility. Characteristics of special populations will also be considered.

GMSL 6012 School Age Lang Lrn Disorders (3 Credits)
This course will cover principles and practices relevant to the assessment and treatment of language and literacy disorders in school age populations including children and adolescents ages 5 to 21. The goal of this course is to equip students with the knowledge and skills that ASHA specifies as necessary for school-based speech-language pathology. Topics covered include: foundational knowledge in the structure of schools; screening, referral, and diagnostic procedures in school settings; collaborating on Individualized Education Plan (IEP) teams; developing evidence-based treatment plans that meet Individuals with Disabilities Education Act (IDEA) guidelines; and theoretical foundations for the treatment of language-based learning disabilities and literacy deficits.

GMSL 6013 Adult Neuromotor Disord-Comm (2 Credits)
An overview of acquired disorders of speech motor planning, programming and execution in neurologically impaired adolescents, young adults and older populations. Special emphasis will be on the methods of assessment and rehabilitation for apraxias and dysarthrias.

GMSL 6016 SLP in the Public School Sett (3 Credits)

GMSL 6022 Biomed Ethics-Prof Issues SLP (2 Credits)
This course presents a study of the application of human and professional values, judgment, and choices to selected ethical and professional dilemmas that arise in health care practice. The scope of practice and code of ethics in speech-language pathology will be explored, along with ethical clinical decision making models. Professional issues (e.g., professional communication, conflict resolution, cultural competence) will also be discussed, using a skills-based approach.

GMSL 6050 Interprof Training Specific LD (0 Credits)
The Project Write to Learn offers an implementation science educational sequence comprised of five units designed for program scholars to gain knowledge, understanding, and experience for the provision of integrated services for improving written expression in children with Specific Learning Disabilities.

GMSL 6055 Project Transition for Children with ASD (0 Credits)

GMSL 6141 Neuroscience (3 Credits)
This course offers information pertaining to communication neuroscience. Communication neuroscience is a specialized sub-field of cognitive neuroscience that deals with the neural networks that support human communication. Special emphasis will be placed on topics such as the development, structure, function and pathology of the nervous system in relation to cognition, language and communication.

GMSL 6518 Acq Disorder Lang-Cog (3 Credits)
The focus of this course will be on theoretically-motivated protocols for diagnostic evaluation and treatment of aphasia. This course, in its entirety, will deal with the conceptual scaffoldings of two major paradigms of thought in the field of aphasia, namely, the impairment approach and the social-functional approach. In addition, this course offers information on the cognitive-linguistic deficits in the right hemisphere damaged adults.

GMSL 6519 Phonological Disorders (3 Credits)
Advanced study of the historical perspectives, current theories and research related to the etiology, evaluation and treatment of articulatory and phonological disorders in the pediatric population.

GMSL 6520 Counseling Techniques in SLP (3 Credits)

GMSL 6521 Dysphagia (3 Credits)
This course is an advanced study of the nature, etiology and physiology of the normal and disordered swallow across the lifespan. Instrumentation as it relates to the diagnosis of dysphagia will be presented. Treatment and clinical decision making will be highlighted.

GMSL 6522 Pediatric Dysphagia-Procedures (3 Credits)
This course provides a solid foundation in the typical development of feeding and the disorders of feeding. Students learn to conduct a clinical feeding evaluation and apply treatment principles that are evidence-based. The course covers the developmental stages of bottle feeding through advancing textures and cup drinking. We discuss tube weaning, sensory-motor issues and multi-component feeding disorders in medically-involved children. There is a special unit on premature infants. Graduate students spend the day rotating through 3 stimulation experiences in the high fidelity NICU center where infant manikins produce stress and aspiration-risk cues. The graduate students conduct a bottle readiness assessment as part of the experience. Early Intervention topics from earlier in the MS program extend into this specialty course with a NJ EIS focus. Our clinical focus is on late talkers, autism spectrum disorder and children at biological and/or environmental risk for communication and feeding disorders. The course is deeply rooted in evidence -based practice of the American Speech, Language, Hearing Association and the World Health Organization.

GMSL 6523 Fluency Disorders (3 Credits)
This course is an advanced study of the nature and etiology of stuttering and other fluency disorders. Current assessment protocols and evidence based intervention programs for pediatric and adult populations are emphasized.

GMSL 6524 Augmentative and Alt Comm (3 Credits)
Assessment, treatment, and management of infants and children with speech motor disorders; intensive study of the interdisciplinary approach to augmentative and alternative communication; team approach to designing appropriate treatment plans, neuromotor management, environmental control, computer access and funding support.

GMSL 6525 Voice Disorders (3 Credits)
Review of the anatomy and physiology of the vocal mechanism and normal and abnormal ventilatory and laryngeal function. Identification, assessment and diagnosis, with emphasis on outcome- based management of patients with laryngeal disorders and conditions affecting the voice.

GMSL 6564 Child Lang Dev and Disorders (3 Credits)

GMSL 7001 Aud and Aural Rehab for SLP (3 Credits)
The objective of this course is to supply the prospective SLP with the information necessary to interpret and best utilize the results of an audiologic assessment, and enable them to plan and carry out appropriate intervention and management strategies. Students will be provided with up to date information/best practices regarding the basic knowledge and skill necessary for performing audiologic screenings (pure tone, tympanometric and otoacoustic emissions as per ASHA's Scope of Practice for the SLP) as well as a working knowledge of evaluation procedures and interpretation of audiometric results, normal and abnormal hearing processes, appropriate treatment and referral. Communication assessment, intervention and management of children and adults with hearing loss will be addressed. Students will also gain an understanding of individualization of treatment/rehabilitation plans, the importance of family education and involvement, and collaborative interdisciplinary team models.

GMSL 7002 Research Methods I (3 Credits)
This course provides an overview of concepts as it relates to the question, design, and data analysis of a research study. The goal is to help students in developing skills that will make them better consumers of research.

GMSL 7003 Research Methods II (3 Credits)
The goal of this course is for students to use critical thinking skills in the evaluation of research in the field of communication sciences and disorders. Students will gain a clearer understanding in evaluating the efficacy of treatment and intervention studies across multiple areas within the field of speech-language pathology. Focus on evidence-based treatment models and single-subject designs will empower students to become better consumers of research.

GMSL 7010 Traumatic Brain Injury (3 Credits)
This course offers information pertaining to the effects of traumatic brain injury on human communication and cognition from a life-span perspective. Although a variety of communication disorders can result from traumatic brain injury, this course mainly highlights the cognitive and linguistic deficits in this population. Contemporary approaches to assessment and treatment of such disorders form the core of this course.

GMSL 7011 Multicult Aspts-Comm Disorders (3 Credits)

GMSL 7013 Craniofacial Disorders (3 Credits)
Study of the evaluation and treatment of speech, language, and feeding problems associated with cleft palate and other craniofacial disorders.

GMSL 7037 Clinical Practicum-Seminar (2 Credits)

GMSL 7038 Climical Externship (5 Credits)
Advanced intensive supervised clinical practicum in speech-language pathology with associated clinical seminar.

GMSL 7039 Research Project I (2 Credits)
Faculty-supervised research review or pilot project focusing on a single area within Speech-Language Pathology or Speech, Language, and Hearing Sciences.

GMSL 7040 Research Project II (1 Credit)
Faculty-supervised independent research on a single area within Speech-Language Pathology or Speech, Language and Hearing Sciences.

GMSL 7041 Clin Pract-Clin Sem I (3 Credits)
Supervised clinical practicum in speech-language pathology with associated clinical seminar.

GMSL 7042 Clin Pract-Clin Sem I (0 Credits)

GMSL 7102 Clinical Practicum/Clin Sem II (2 Credits)
Supervised clinical practicum in speech-language pathology with associated clinical seminar.

GMSL 7103 Clinical Externship (5 Credits)
Advanced intensive supervised clinical practicum in speech-language pathology with associated clinical seminar.

GMSL 7200 Procedures for Clinical Practice in SLP I Procedures for Clinical Practice in SLP I (2 Credits)
This course focuses on assessment in communication disorders as a problem-solving process. Students will develop knowledge and skill competencies in selection, administration, and analysis of testing materials as well as writing and interpreting clinical notes and reports for pediatric populations. The course will also cover review of policies, procedures, expectations, and professional behavior in the clinical environment.

GMSL 7202 Procedures for Clinical Practice in SLP I Lab - Diagnostic and Clinical Principles Lab (1 Credit)
Students will receive instruction and be evaluated both individually and in dyads for skills related to diagnostic principles, including the selection, administration, and analysis of testing materials as well as caregiver counseling. Students will participate in a Clinical Education Group (CEG) clinical skill training protocol throughout the semester. The CEG lab protocol is competency-based and focuses on providing students with hands-on opportunities to refine skills and demonstrate competencies needed for success in clinical rotations and future practice as a speech-language pathologist.

GMSL 7601 Independent Study (1 Credit)

HCAD 6002 Res Methods and Stat Analysis (3 Credits)
This course reviews and applies research study design methodologies (quantitative, qualitative and mixed), as well as statistics for healthcare professionals and practitioners. Topics include descriptive and inferential statistics, issues in sampling and hypothesis testing, analysis of variance, and regression. Students use hands-on applications essential to developing, analyzing, and interpreting healthcare studies. Computer software is used for statistical analysis.

HCAD 6005 Financial-Managerial Acct-Cost (3 Credits)
Provides a hands-on introduction to basic financial reports and financial analysis for planning and decision-making. Emphasizes tools for analyzing financial statements, determining profitability, cost and pricing models and budgeting critical for managerial decision making. Comprehensive understanding of the application of financial information to support managerial planning, control, and resource allocation functions will be emphasized by exploring the interaction of financial, strategic, organizational policy and the external environment information on decisions.

HCAD 7511 Intro to Healthcare System (3 Credits)

HCAD 7513 Healthcare Management (3 Credits)
This course studies the role of the contemporary healthcare manager with emphasis on identifying basic managerial skills and knowledge that contribute to effective healthcare administration. Course materials focus on contemporary knowledge, skills and real-world applications for management of diverse healthcare organizations.

HCAD 7514 Healthcare Fin Mgmt-Acct (3 Credits)
Designed to enhance both analytical and decision-making skills, this course covers financial accounting as applied to healthcare organizations. Emphasizes tools for analyzing financial statements as well as key management issues (profitability and liquidity) and explores the use of debt as part of financial structure. Prepares students to apply financial management theory and concepts as real-world managers in the health services industry. Prerequisite: HCAD 6005 or permission of instructor.

HCAD 7515 Global Health Management (3 Credits)
This course is designed to provide health professionals with an essential global health systems skill set. The approach, organization and outcomes of global health systems provides invaluable lessons for health system delivery that can be applied across the continuum of healthcare service and delivery. With the assistance of the instructor, students will complete weekly assignments building on the six components of global health systems and the Sustainable Development Goals (SDG). The intended result of the course is for the students to complete projects that integrate an understanding of global health systems approaches appropriate for making strategic choices in healthcare organization, management, delivery, and outcomes.
Prerequisites: HCAD 7521 with a minimum grade of C

HCAD 7517 Health Finance (2 Credits)
Designed to enhance analytical and managerial decision-making skills; this course builds on the concepts presented in HCAD 6005 and covers financial analysis applications such as: working capital needs assessment, risk and return, capital planning, the use of debt and equity in organizational financing structures and the cost of capital as applied to health sector organizations. By focusing on the proper application of financial analysis into the managerial decision-making process this course will enable students to become better stewards of scarce resources. This course has been designed to ensure that students understand, think through and correctly apply key financial concepts and processes to better manage health sector organizations.
Prerequisites: HCAD 6005 with a minimum grade of C

HCAD 7518 Managing Comm Health Systems (3 Credits)
Designed to examine the manager's role, responsibilities and involvement in developing, implementing, and evaluating strategies for community health initiatives. Topics covered include community health assessment techniques, collaboration strategies, and the application of population management models for health promotion. Emphasis on managerial epidemiology (study of distribution and determinants of diseases) and its integration with health systems planning to meet local community needs. Prerequisite: HCAD 7521 or permission of instructor.

HCAD 7519 Population Health Management (3 Credits)
Population Health Management provides a comprehensive review of population health approaches, strategies, and programs designed to improve consumers' access and quality of care while managing costs. Course content covers policy implications and delivery of population health best practices within the health sector, their impact on consumers and providers, and consumer engagement programs throughout the continuum of care. The course also integrates social determinant identification, basic managerial epidemiological concepts, and highlights the potential use of data analytics for decision-making.

HCAD 7520 Healthcare Data Analytics (3 Credits)
This course is designed to provide health professionals with an essential data analytics skill set that can be applied across the continuum of healthcare service and delivery. With the assistance of the instructor, students will complete weekly assignments building on the core functions of data analysis, visualization and presentation, data mining strategies, database management, modelling of trends and population-health management applications. The intended result of the course is for the students to complete projects that integrate an understanding of health data and analytic strategies that are appropriate for making strategic choices in health policy and general healthcare delivery research and management within the Triple Aim framework.

HCAD 7521 21st Cent Healthcare System (2 Credits)
Provides a systematic overview of the structures and organizations in U.S. healthcare delivery systems with emphasis on interactions of governmental policy, authorities, delivery systems, financing of health care, regulation, competition, organizational innovations in healthcare services and alternate delivery strategies. Also examines stakeholder interests.

HCAD 7522 Healthcare Policy (2 Credits)
A major overview of current U.S. health policies and their implications with in-depth study of the policy process and analytical approaches to decision making. Special emphasis on the nature and role of healthcare policy studies in decision-making. Also includes an examination of comparative international systems

HCAD 7525 Practice Mgmt for Healthcare (3 Credits)
This course is designed to provide a comprehensive overview of medical practice management, the issues, tools and techniques to resolve administrative issues. Practice Management will provide the learner with insights into contemporary financial models and regulatory issues that influence today's practice environment. Specific attention is focused on culture dynamics, human resource applications, and governance issues that make medical practices unique among healthcare organizations.

HCAD 7530 Change Mgmt - Innovation Hlth (2 Credits)
Prerequisites: HCAD 7521 with a minimum grade of C and HCAD 7513 with a minimum grade of C

HCAD 7991 Internship (3 Credits)
Designed for pre-service students or for those with fewer than two years of management experience, this course affords students an opportunity to learn management skills through onsite experience. The students must complete a minimum of 300 hours of managerial or administrative work under the tutelage of a healthcare administrator and complete all assignments associated with the internship. Seminar discussions link students' real-world experience with common human resource management topics. Requires instructor approval. Students may be required to complete and pay for site-specific testing requirements.

HCAD 7992 Practicum (3 Credits)
Consists of a 3-credit, group-consulting project related to an area of healthcare administration or management. The practicum typically requires the writing of a management report and the delivery of an oral presentation for the partner organization. All work is completed under faculty supervision. May require transportation to practicum site. Requires instructor approval.

HCAD 7993 Research Seminar (3 Credits)
Designed for students currently working full time on a supervisory or management level in healthcare, this course gives theeach individual anthe opportunity to design and conduct a research project that focuses on a management or policy problem at his/her place of employment or in the public arena. The student presents methodology, results and recommendations both as a written capstone project and as an oral presentation. Requires instructor approval.

HCAD 7997 Project Completion (3 Credits)
This course is an independent project based on an aspect of healthcare delivery, administration or policy. With the assistance of the instructor, the topic is of the student's own choosing. The course provides an excellent opportunity for the student to delve more deeply into an area of healthcare which he or she has not previously studied, or to relate the curriculum to their workplace. The intended result of the project is for the student to make a contribution to his or her organization or profession. Requires instructor approval.

HCAD 7998 International Capstone (3 Credits)
This 7-week hybrid course is a comparative, analytical group project based on a selected component of healthcare organization, delivery, financing, or policy. It provides students with an excellent opportunity to explore and analyze a global health system via a virtual partnership collaboration and a short-term on-site residency. Students gain a greater appreciation and cultural sensitivity to healthcare experiences of other countries and produce an analytical report and presentation on their group's chosen aspect of healthcare. This course requires instructor approval.

HCAD 8514 Healthcare Economics (3 Credits)
The study and application of economic process and methods pertinent to healthcare managers and policy practitioners. Traditional economic models pertaining to supply and demand, competition, market power, production function and efficiency are applied to the healthcare industry. Case studies reflect recent economic conditions and their application to real world management decisions. Prerequisite: HCAD 7521 or permission of instructor.

HCAD 8515 Health Economics (2 Credits)
The study and application of economic process and methods pertinent to healthcare managers and policy practitioners. Traditional economic models of supply and demand, competition, market power, labor choices, production functions and efficiency are applied to the health sector. Primary focus is on the application of economic principles to facilitate real world management decisions.
Prerequisites: HCAD 7521 with a minimum grade of C

HCAD 8517 Strat Plan Mkting Hlthcare Org (3 Credits)
Study of the role, functions and application of strategic planning and marketing in healthcare organizations. Emphasis on the process of strategy assessment, development, and implementation and the unique aspects of healthcare services and service design/performance as they interact with marketing plans. Prerequisites: HCAD 6005, 7513, 7521, and 8515 or permission of instructor.

HCAD 8518 Legal - HR Issue in Healthcare (3 Credits)
Overview of legal issues associated with the delivery of healthcare and the legal pitfalls surrounding everyday practice and administration. Additionally, explores legal aspects of human resource administration in health care, as well as issues of liability and corporate responsibility.

HCAD 8521 Quality - Risk Mgmt Healthcare (3 Credits)
This course provides an overview of quality improvement and information management systems for health care leaders. Quality performance management models, approaches, tools, and techniques are presented in the context of organizational culture and leadership. Management techniques applicable to the use of health information systems are discussed along with QI/QM applications and topics - computerized records, order entry systems, and electronic health care applications. Reviews current ethical, legal and policy implications and regulations.

HCAD 8522 Topics in HealthCare Managemnt (3 Credits)

HCAD 8523 Ethics in Healthcare Admin (2 Credits)
This course offers students a basis for analyzing medical and healthcare ethics involving clinical practice, legal dimensions, and public policy. Personal, professional, and organizational ethical dilemmas and decision-making responsibilities are discussed in the context of contemporary healthcare factors and environment.

HCAD 8530 Emerg Mgmt for HC Profess (2 Credits)
As health professionals at all levels seek to understand the impact of natural and man-made disasters on health status, best practices for emergency management strategies are emerging. Using an all-hazards approach, this course provides an overview of emergency preparedness and its application to all aspects of a population's health. Focuses on issues such as bioterrorism, food security, pandemics, and other related topics. Skills necessary for performing risk vulnerability assessments, developing emergency management plans, and crisis versus traditional operational processes will be covered.

HCAD 8531 Emerg Mgmt and Health Security (3 Credits)
As health professionals at all levels seek to understand the impact of natural and man-made disasters on health status, best practices for emergency management strategies are emerging. Using an all-hazards approach, this course provides an overview of emergency preparedness and its application to all aspects of a population's health. Focuses on issues such as bioterrorism, food security, pandemics, and other related topics. Skills necessary for performing risk vulnerability assessments, developing emergency management plans, and crisis versus traditional operational processes will be covered. Prerequisite: HCAD 7521 or permission of instructor.

HCAD 8720 Professionalism - Leadership I (1 Credit)
In this first of three courses in Professionalism and Leadership, students will explore the dynamic nature of leadership in the context of modern healthcare organizations. Various theories and models concerning leadership styles will be considered and students will utilize instruments to consider their preferences regarding leadership styles. Additionally, to assist students in their professional development the course will focus on several introductory elements of the MHA Program's Professionalism Module.

HCAD 8721 Professionalism-Leadership II (1 Credit)
In this second of three courses in Professionalism and Leadership, students will explore the dynamic nature of leadership in the context of modern healthcare organizations. Various concepts related to leadership, including but not limited to power, motivation, talent management, emotional intelligence…etc. will be considered. Additionally, to assist students in their professional development the course will focus on several mid-program elements of the MHA Program's Professionalism Module.

HCAD 8722 Professionalism-Leadership III (1 Credit)
In this third of three courses in Professionalism and Leadership, students will focus on synthesizing prior MHA course learning and applying it to case studies of modern healthcare organizations facing transformational challenges and to career planning. Students will also reconsider leadership styles, but in the context of leadership teams. Additionally, to assist students in their professional development the course will focus on several noted last year elements of the MHA Program's Professionalism Module.

HCAD 8999 Independent Study II (1 Credit)

HCAD 9991 Independent Study (1 Credit)

HCAD 9992 Independent Study (2 Credits)

HCAD 9993 Independent Study (3 Credits)