SCHOOL OF EXERCISE AND REHABILITATION SCIENCES

RUTHIE KUCHAREWSKI, chair

The school of exercise and rehabilitation sciences offers graduate programs leading to the master of science in exercise science (M.S.E.S.) and the doctor of philosophy in exercise science (Ph.D.) degrees. These programs involve a combination of courses, seminars, clinical experiences and research that is intended to prepare individuals for a wide range of careers that relate to exercise science. Involvement in research is emphasized throughout the program.

In the recreation professions, the master of arts in recreation and leisure studies with specializations in recreation administration or recreational therapy is available.

A dual doctoral degree program leading to the doctor of philosophy in exercise science is available for students admitted to the occupational therapy doctorate or the doctorate of physical therapy. Please see those programs which are located in school of exercise and rehabilitation sciences.

Degrees Offered

- Doctor in Physical Therapy/PhD in Exercise Science (http://utoledo-public.courseleaf.com/graduate/health-human-services/graduate-programs-schools/exercise-rehabilitation-sciences/doctor-physical-therapy-phd-exercise-science)
- MS in Exercise Science (http://utoledo-public.courseleaf.com/graduate/health-human-services/graduate-programs-schools/exercise-rehabilitation-sciences/ms-exercise-science)

ATTR 6010 Clinical Applications I
[1 credit hour (0, 0, 1)]
Clinical skill experience is provided to develop autonomous athletic trainer and provide exposure to implementing evidence based practice in clinical practice.

ATTR 6020 Clinical Applications II
[1 credit hour (0, 0, 1)]
Continue to develop autonomous athletic training skills built upon in Clinical Applications I and continue to advance diagnosis, treatment and intervention skills.
Prerequisites: KINE 6010 with a minimum grade of D- or ATTR 6010 with a minimum grade of D-

ATTR 6030 Clinical Applications III
[2 credit hours (2, 0, 0)]
Advanced integration of clinical skills with the introduction of mentoring athletic training students in a clinical setting.
Prerequisites: KINE 6020 with a minimum grade of D- or EXSC 6020 with a minimum grade of D-

ATTR 6040 Clinical Applications IV
[2 credit hours (2, 0, 0)]
Preparation of autonomous athletic training care for the transition into an occupation in sports medicine.
Prerequisites: KINE 6030 with a minimum grade of D- or EXSC 6030 with a minimum grade of D-

ATTR 6120 Evaluation and Management of Peripheral Joint Injury
[4 credit hours (3, 1, 0)]
The study of the pathology, etiology and presentation of lower extremity injuries. Subjective and objective components as well as orthopedic special testing will be introduced and serve as the foundation for the formulation of a systematic evaluation method. In addition, acute management techniques include first aid as well as immobilization methods will be introduced. Laboratory concepts include selection and implementation of appropriate evaluation and acute management techniques.
Prerequisites: KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of C+ or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of C+

ATTR 6140 Functional Musculoskeletal Anatomy
[3 credit hours (1, 2, 0)]
A cadaver anatomy course focusing on foundation concepts of structural kinesiology and anatomy. In addition, the structure of various musculoskeletal tissues and functional joint complexes will be examined.

ATTR 6150 Foundations of Athletic Training Practice
[4 credit hours (3, 1, 0)]
Introduction to the profession of athletic training including history, regulation of practice, and the role of the profession in the sports medicine healthcare team. Additional concepts include risk management, injury recognition, systematic evaluation and acute management of injuries. Laboratory concepts include selection and application of appropriate prophylactic and protective taping, wrapping and bracing techniques as well as selection and application of appropriate first aid, ambulation aids and immobilization.

ATTR 6220 Evaluation and Management of Head and Spine Injuries
[4 credit hours (3, 1, 0)]
The study of the pathology, etiology and presentation of upper extremity injuries common in active populations. Subjective and objective components as well as orthopedic special testing will be introduced and serve as the foundation for the formulation of a systematic evaluation method. In addition, acute management techniques include first aid as well as immobilization methods will be introduced. Laboratory concepts include selection and implementation of appropriate evaluation and acute management techniques.
Prerequisites: (KINE 6120 with a minimum grade of C+) and KINE 6610 with a minimum grade of B-) or (ATTR 6120 with a minimum grade of C+) and ATTR 6610 with a minimum grade of B-)

Degrees Offered

- Doctor in Physical Therapy/PhD in Exercise Science (http://utoledo-public.courseleaf.com/graduate/health-human-services/graduate-programs-schools/exercise-rehabilitation-sciences/doctor-physical-therapy-phd-exercise-science)
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[2 credit hours (2, 0, 0)]
Advanced integration of clinical skills with the introduction of mentoring athletic training students in a clinical setting.
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[2 credit hours (2, 0, 0)]
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Prerequisites: KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of C+ or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of C+

ATTR 6140 Functional Musculoskeletal Anatomy
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A cadaver anatomy course focusing on foundation concepts of structural kinesiology and anatomy. In addition, the structure of various musculoskeletal tissues and functional joint complexes will be examined.

ATTR 6150 Foundations of Athletic Training Practice
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Prerequisites: (KINE 6120 with a minimum grade of C+) and KINE 6610 with a minimum grade of B-) or (ATTR 6120 with a minimum grade of C+) and ATTR 6610 with a minimum grade of B-)

Degrees Offered

- Doctor in Physical Therapy/PhD in Exercise Science (http://utoledo-public.courseleaf.com/graduate/health-human-services/graduate-programs-schools/exercise-rehabilitation-sciences/doctor-physical-therapy-phd-exercise-science)
- MS in Exercise Science (http://utoledo-public.courseleaf.com/graduate/health-human-services/graduate-programs-schools/exercise-rehabilitation-sciences/ms-exercise-science)
ATTR 6310 Therapeutic Interventions I
[3 credit hours (2, 1, 0)]
The study of the physiological, mechanical and bio-electrical principles related to the application of thermal, electrical and mechanical modalities in the treatment of musculoskeletal injury. Laboratory concepts include selection and application of appropriate modality use specific to patient values and situation.
**Prerequisites:** KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of C+ or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of C+

ATTR 6410 Clinical Biomechanics
[2 credit hours (1, 1, 0)]
The study of common kinematic and kinetic alterations that can occur following acute and chronic musculoskeletal injuries and the deleterious effects these changes can cause. In addition, students will be introduced to both laboratory and clinical techniques to assess and alter the kinematic and kinetic deficits associated with injury.
**Prerequisites:** KINE 6120 with a minimum grade of C+ and KINE 6610 with a minimum grade of B- or ATTR 6120 with a minimum grade of C+ and ATTR 6610 with a minimum grade of B-
**Term Offered:** Spring, Summer

ATTR 6500 Biomechanics Of Posture And Balance
[3 credit hours (3, 0, 0)]
Focus on the mechanical and sensory-motor factors involved in the control of balance and posture. Emphasis on the theories, the influence of pathology and techniques for the assessment of balance.
**Prerequisites:** KINE 6130 with a minimum grade of D- or ATTR 6130 with a minimum grade of D-

ATTR 6510 Evaluation and Management of General Medical Conditions
[3 credit hours (2, 1, 0)]
The study of the pathology, etiology and presentation of common general medical conditions in active populations. Systems will include cardiovascular, respiratory, gastrointestinal, genitourinary, reproductive, dermatologic and neurologic systems and infectious diseases. For each system, subjective and objective components as well as common special tests will be introduced. In addition, concepts of pharmacology including pharmacokinetics, basic drug classifications and legal aspects of use will be covered. Specific focus will be placed on common therapeutic drugs used in sports medicine.
**Prerequisites:** KINE 6620 with a minimum grade of B- or ATTR 6620 with a minimum grade of B-

ATTR 6520 Management of Emergencies in Athletic Training
[3 credit hours (3, 0, 0)]
Kinesiological principles underlying the assessment and treatment of individuals with normal and pathological conditions. Emphasis will be placed on clinical applications of mechanical principles, motor control and muscle activity to improve performance and prevent further injury.

ATTR 6600 Issues And Management In Athletic Training
[3 credit hours (3, 0, 0)]
This course addresses current issues that affect the profession of Athletic Training. Topics cover issues that influence clinical practice as well as political issues related to the profession.
**Term Offered:** Spring, Fall

ATTR 6610 Clinical Skills I
[2 credit hours (2, 0, 0)]
The first of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a certified athletic trainer.
**Prerequisites:** KINE 6150 with a minimum grade of C+ and KINE 6140 with a minimum grade of C+ or ATTR 6150 with a minimum grade of C+ and ATTR 6140 with a minimum grade of C+

ATTR 6620 Clinical Skills II
[2 credit hours (2, 0, 0)]
The second of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a Certified Athlete Trainer.
**Prerequisites:** KINE 6610 with a minimum grade of B- or ATTR 6610 with a minimum grade of B-
**Term Offered:** Spring

ATTR 6630 Clinical Skills III
[2 credit hours (2, 0, 0)]
The third of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a Certified Athlete Trainer.
**Prerequisites:** KINE 6620 with a minimum grade of B- or ATTR 6620 with a minimum grade of B-

ATTR 6640 Clinical Skills IV
[2 credit hours (2, 0, 0)]
The final of sequential courses that focuses on development of professional behaviors and review of concepts and skills from previous coursework. In addition, clinical education rotations provided will allow students to implement course material into a clinical setting and gain practical hands-on experience working under the supervision of a Certified Athlete Trainer.
**Prerequisites:** KINE 6630 with a minimum grade of B- or ATTR 6630 with a minimum grade of B-

ATTR 6660 Evidence-Based Practice in Sports Medicine
[2 credit hours (2, 0, 0)]
This course will introduce the student to clinical epidemiology and the evaluation of the efficacy of prevention, diagnosis, and treatment strategies in athletic training and sports medicine.
**Term Offered:** Fall

ATTR 6670 Pathology of Orthopedic Injury
[3 credit hours (3, 0, 0)]
An in-depth investigation into the basic structure and mechanisms of injury of various musculoskeletal tissue applied to the recognition and prevention of specific orthopedic injuries and conditions.
**Term Offered:** Spring, Fall
ATTR 6680 Advanced Interventions I
[2 credit hours (2, 0, 0)]
Students will be introduced to advanced techniques that impact clinical practice in Athletic Training, including manual therapy, advanced orthopedic evaluation, and advanced management and planning related to emergency medicine.
Term Offered: Spring

ATTR 6690 Advanced Interventions II
[3 credit hours (2, 1, 0)]
Students will be introduced to advanced evaluation and assessment techniques that impact clinical practice, including general medical conditions, psychosocial, professionalism, and profession advocacy.
Prerequisites: KINE 6680 with a minimum grade of D- or ATTR 6680 with a minimum grade of D-

ATTR 6700 Therapeutic Interventions II
[3 credit hours (2, 1, 0)]
The study of the advanced techniques related to rehabilitation of musculoskeletal injuries. Concepts include development of an exercise program, exercise program progression, indication and contraindications for specific techniques as well as reconditioning, return to play and preventative programs. Laboratory concepts include selection and implementation of appropriate rehabilitation techniques specific to patient values and situation.
Prerequisites: KINE 6620 with a minimum grade of B- or ATTR 6620 with a minimum grade of B-
Term Offered: Spring, Fall

ATTR 6710 Organization And Administration Of Athletic Training Programs
[3 credit hours (3, 0, 0)]
Administration of athletic training programs including legal issues, athletic training room management, budgeting, staffing, insurance, medical records, emergency care planning, preparticipation physical examinations, athletic training room design and public relations.

ATTR 6730 Optimization of Performance and Wellness
[3 credit hours (3, 0, 0)]
An investigation into the nutritional and psychological components of optimal performance and wellness in active populations as well as recognition and appropriate referral of patients with suspected substance abuse and mental health disorders. In addition, concepts related to wellness and fitness assessment and weight management in a healthy population including prescription of strengthening and conditioning exercises will be discussed.
Prerequisites: KINE 6630 with a minimum grade of B- or ATTR 6630 with a minimum grade of B-

ATTR 6800 Foundations of Scholarly Practice
[3 credit hours (3, 0, 0)]
An introduction to the consumption and appraisal of research. Investigation of evidence-based practice concepts as well as introduction to literature databases and resources available to help translate research to clinical practice.
Prerequisites: KINE 6140 with a minimum grade of C+ and KINE 6150 with a minimum grade of C+ or ATTR 6140 with a minimum grade of C+ and ATTR 6150 with a minimum grade of C+
Term Offered: Fall

ATTR 6810 Scholarly Project I
[1 credit hour (0, 1, 0)]
The first of sequential courses designed to provide students hands-on engagement in clinical research and scholarship related to the athletic training field. Students will work with course Instructor and or research advisor to begin to design research project related that question.
Prerequisites: KINE 6500 with a minimum grade of C+ and KINE 6610 with a minimum grade of B- or ATTR 66500 with a minimum grade of C+ and ATTR 6610 with a minimum grade of B-

ATTR 6820 Scholarly Project II
[1 credit hour (0, 1, 0)]
The second of sequential courses designed to provide students hands-on engagement in clinical research and scholarship related to the athletic training field. Students will work with course Instructor and or research advisor to carry out a research project including but not limited to recruitment of subjects, data collection and data analysis.
Prerequisites: KINE 6800 with a minimum grade of C+ and KINE 6620 with a minimum grade of B- or ATTR 6800 with a minimum grade of C+ and ATTR 6620 with a minimum grade of B-

ATTR 6830 Scholarly Project III
[1 credit hour (0, 1, 0)]
The third of sequential courses designed to provide students hands-on engagement in clinical research and scholarship related to the athletic training field. Students will work with course Instructor and or research advisor to carry out a research project including but not limited to recruitment of subjects, data collection, data analysis and preparation of scholarly publications and or presentations.
Prerequisites: KINE 6810 with a minimum grade of C+ and KINE 6630 with a minimum grade of B- or ATTR 6810 with a minimum grade of C+ and ATTR 6630 with a minimum grade of B-
Term Offered: Spring

ATTR 6910 Introduction to Sports Medicine Research I
[1 credit hour (1, 0, 0)]
Students will be introduced to sports medicine research with a focus on evaluating the literature, asking a clinically relevant research question, and developing experimental hypotheses.

ATTR 6920 Introduction to Sports Medicine Research II
[1 credit hour (1, 0, 0)]
Students will continue to develop the ability to critique research and will be introduced to developing research methods to address a clinically relevant research question related to sports medicine.
Prerequisites: KINE 6910 with a minimum grade of D- or ATTR 6910 with a minimum grade of D-

ATTR 8600 Issues And Management In Athletic Training
[3 credit hours (3, 0, 0)]
This course addresses current issues that affect the profession of Athletic Training. Topics cover issues that influence clinical practice as well as political issues related to the profession.
Term Offered: Fall

ATTR 8650 Evidence-Based Practice in Sports Medicine
[3 credit hours (3, 0, 0)]
An investigation into the science and theories of therapeutic rehabilitation and its impact on clinical practice using current literature and databases from the areas of evidence based medicine.
Term Offered: Fall
ATTR 8670 Pathology of Orthopedic Injury
[3 credit hours (3, 0, 0)]
An in-depth investigation into the basic structure and mechanisms of injury of various musculoskeletal tissue applied to the recognition and prevention of specific orthopedic injuries and conditions.
Term Offered: Spring, Fall

EXSC 5110 Measurement And Statistical Inference In Human Performance
[3 credit hours (3, 0, 0)]
Application of measurement and statistical inference to human performance testing and research. Includes descriptive and inferential statistics, principles of test construction and introduction to authentic assessment in public schools.
Term Offered: Spring

EXSC 5250 Readings In Exercise Biology
[3 credit hours (0, 0, 3)]
Faculty and student directed readings of original research in Exercise Biology. Readings will focus on how changes in physical activity influence the biology of skeletal muscle.
Term Offered: Spring

EXSC 6100 Physiology of Exercise
[3 credit hours (3, 0, 0)]
This course is designed to provide an understanding of the mechanisms of the physiological responses to exercise. Emphasis will be placed on adaptations to exercise training and the role of exercise in health and disease.
Term Offered: Fall

EXSC 6130 Biomechanics Of Human Motion
[3 credit hours (3, 0, 0)]
This course provides a basic overview of the principles of biomechanics as they apply to human movement. In-depth discussion and lab activities focus on the application of these principles to such topics as muscle function, locomotion, balance, mechanisms of injury and ergonomics.
Term Offered: Spring

EXSC 6200 Biomechanical Instrumentation
[3 credit hours (3, 0, 0)]
Provides students with experience in the research and clinical use of videography, force and pressure plates, electromyography and other systems in applied biomechanics. Emphasis on hands-on lab experience and topics related to data collection and signal processing.
Prerequisites: KINE 6130 with a minimum grade of D- or EXSC 6130 with a minimum grade of D-
Term Offered: Spring

EXSC 6230 Scientific Writing And Research Methods
[3 credit hours (3, 0, 0)]
Principles and issues involved in the design and conduct of research in exercise science: critical evaluation, research design, development of a research proposal, grant acquisition, and compliance with institutional and federal guidelines on the use of humans and animals.
Term Offered: Fall

EXSC 6420 Cardiopulmonary Exercise Physiology
[3 credit hours (3, 0, 0)]
The responses and adaptations of the cardiovascular and pulmonary systems to exercise in healthy individuals.
Prerequisites: KINE 6100 with a minimum grade of D- or EXSC 6100 with a minimum grade of D-
Term Offered: Spring, Fall

EXSC 6430 Environmental Physiology
[3 credit hours (0, 0, 3)]
Physiological responses and adaptations to extreme environments.
Term Offered: Fall

EXSC 6460 Readings in Cardiovascular Physiology
[3 credit hours (0, 0, 3)]
This is a faculty directed examination of current research in Cardiovascular Physiology. Emphasis is placed on the role of physical activity on the prevention and/or treatment of cardiovascular treatment.
Term Offered: Spring, Fall

EXSC 6540 Laboratory Techniques In Exercise Physiology
[3 credit hours (1, 2, 0)]
This course covers theoretical and practical knowledge for the assessment of exercise metabolism, cardiorespiratory function, body composition, thermoregulation and skeletal muscle function. Hands-on data collection will be emphasized.
Term Offered: Fall

EXSC 6550 Lab Techniques In Exercise Biology
[3 credit hours (3, 0, 0)]
The course provides students with theoretical and practical knowledge for assessing cellular and molecular responses to exercise and inactivity. Emphasis will be placed on laboratory safety, reagent preparation, cell culture techniques, and tissue analysis.
Prerequisites: (KINE 6100 with a minimum grade of D- and KINE 6540 with a minimum grade of D-) or (EXSC 6100 with a minimum grade of D- and EXSC 6540 with a minimum grade of D-)

EXSC 6650 Advanced Clinical Anatomy
[2 credit hours (0, 2, 0)]
A cadaver anatomy course focusing on the extremities. Emphasis will be placed on the link between anatomical structure, orthopedic injuries, and clinical practice.
Term Offered: Fall

EXSC 6690 Masters Thesis In Exercises Science
[1-4 credit hours (0, 0, 0-3)]
Independence research in Exercise Science completed as part of the requirements for the Master of Science in Exercise Science degree.
Term Offered: Spring, Summer, Fall

EXSC 6990 Independent Study In Exercise Science
[1-4 credit hours (0, 0, 0-4)]
Faculty supervised independent reading, laboratory research, field experience and other activities not suited for class instruction.
Term Offered: Spring, Summer, Fall
EXSC 7110 Measurement And Statistical Inference In Human Performance
[3 credit hours (3, 0, 0)]
Application of measurement and statistical inference to human performance testing and research. Includes descriptive and inferential statistics, principles of test construction and introduction to authentic assessment in public schools.
Term Offered: Spring

EXSC 7250 Readings In Exercise Biology
[3 credit hours (0, 0, 3)]

EXSC 8100 Physiology of Exercise
[3 credit hours (3, 0, 0)]
This course is designed to provide an understanding of the physiological responses to exercise. Emphasis will be placed on adaptations to exercise training and the role of exercise in health and disease.
Term Offered: Fall

EXSC 8130 Biomechanics of Human Motion
[3 credit hours (3, 0, 0)]
This course provides a basic overview of the principles of biomechanics as they apply to human movement. In-depth discussion and lab activities focus on the application of these principles to such topics as muscle function, locomotion, balance, mechanisms of injury and ergonomics.
Term Offered: Spring, Fall

EXSC 8200 Biomechanical Instrumentation
[3 credit hours (3, 0, 0)]
Provides students with experience in the research and clinical use of videography, force and pressure plates, electromyography and other systems in applied biomechanics. Emphasis on hands-on lab experience and topics related to data collection and signal processing.
Prerequisites: (KINE 6130 with a minimum grade of D- and KINE 8130 with a minimum grade of D-) or (EXSC 6130 with a minimum grade of D- and EXSC 8130 with a minimum grade of D-)
Term Offered: Spring

EXSC 8230 Scientific Writing And Research Methods
[3 credit hours (3, 0, 0)]
Principles and issues involved in the design and conduct of research in exercise science: critical evaluation, research design, development of a research proposal, grant acquisition, and compliance with institutional and federal guidelines on the use of humans and animals.
Term Offered: Fall

EXSC 8420 Cardiopulmonary Exercise Physiology
[3 credit hours (3, 0, 0)]
The responses and adaptations of the cardiovascular and pulmonary systems to exercise in healthy individuals.
Prerequisites: KINE 8100 with a minimum grade of D- or EXSC 8100 with a minimum grade of D-
Term Offered: Spring, Fall

EXSC 8430 Environmental Physiology
[3 credit hours (3, 0, 0)]
Physiological responses and adaptations to extreme environments.
Term Offered: Fall

EXSC 8460 Readings in Cardiovascular Physiology
[3 credit hours (0, 0, 3)]
This is a faculty directed examination of current research in Cardiovascular Physiology. Emphasis is placed on the role of physical activity on the prevention and/or treatment of cardiovascular diseases.
Prerequisites: KINE 8100 with a minimum grade of D- or EXSC 8100 with a minimum grade of D-
Term Offered: Spring, Fall

EXSC 8540 Laboratory Techniques In Exercise Physiology
[3 credit hours (1, 2, 0)]
This course covers theoretical and practical knowledge for the assessment of exercise metabolism, cardiorespiratory function, body composition, thermoregulation and skeletal muscle function. Hands-on data collection will be emphasized.
Term Offered: Spring, Fall

EXSC 8550 Lab Techniques In Exercise Biology
[3 credit hours (3, 0, 0)]
The course provides students with theoretical and practical knowledge for assessing cellular and molecular responses to exercise and inactivity. Emphasis will be placed on laboratory safety, reagent preparation, cell culture techniques, and tissue analysis.
Prerequisites: (KINE 8100 with a minimum grade of D- and KINE 8540 with a minimum grade of D-) or (EXSC 8100 with a minimum grade of D- and EXSC 8540 with a minimum grade of D-)

EXSC 8720 Anatomical Concepts for Clinical Practice
[3 credit hours (0, 0, 2)]
A cadaver anatomy course focusing on the extremities. Emphasis will be placed on the link between anatomical structure, orthopedic injuries, and clinical practice.
Term Offered: Fall

EXSC 8960 Doctoral Dissertation In Exercise Science
[1-12 credit hours (0, 0, 0-12)]
Directed research towards completion of the doctoral degree. Students may register for credit in more than one semester. Total dissertation credit toward the degree may not exceed 16 hours.
Term Offered: Spring, Summer, Fall

EXSC 8990 Doctoral Study In Exercise Science
[1-4 credit hours (0, 0, 0-4)]
Faculty supervised independent reading, laboratory research, field experience and other activities not suited for class instruction.
Term Offered: Spring, Summer, Fall

OCCT 7000 Foundations of Occupational Therapy
[3 credit hours (3, 0, 0)]
This course introduces students to the history, philosophy, core concepts, ethics, and the domain and process of occupational therapy. Students also explore the basic tenets of therapeutic occupation and investigate the role that chosen occupations play within an individual’s daily life. Professional skills in occupational analysis and professional communication are introduced and applied. Students also complete concurrent lab experiences with students from other health care professions as part of the university-wide Interprofessional Education Program. Prerequisite: Admission to OTD Program
Term Offered: Fall
OCCT 7010 OT Models of Practice I
[5 credit hours (5, 5, 0)]
Examines the biomechanical model of practice including its musculoskeletal and kinesiological foundations. Includes assessments and interventions for prevention, adaptation, and compensation. Prerequisite: Admission to OTD Program
Term Offered: Fall

OCCT 7020 OT Models of Practice II
[5 credit hours (5, 0, 0)]
An introduction to the nervous system, with emphasis on the neurological basis of human occupation and the effects of neurological conditions (disease, injury, and mental illness) on occupational performance. Explores neuroplasticity and neuro rehabilitation. Labs include neuroanatomy and clinical assessment. Prerequisite: Occupational Therapy Models of Practice I Co-requisite: Occupational Therapy Models of Practice III
Term Offered: Spring

OCCT 7030 OT Models of Practice III
[4 credit hours (4, 0, 0)]
Explores historical and alternative conceptual frameworks of occupation and therapeutic occupation. Examines cognitively based and general models of practice. Presents related assessments and interventions for prevention, adaptation, and compensation. Prerequisite: Occupational Therapy Models of Practice I Co-requisite: Occupational Therapy Models of Practice II
Term Offered: Spring

OCCT 7040 OT Models of Practice IV
[5 credit hours (0, 0, 0)]
Focuses on the occupational therapy process and models of practice for intervention with children and individuals with neurological impairments, including assessment and intervention. Prerequisite: Occupational Therapy Models of Practice II
Term Offered: Summer

OCCT 7110 Research in OT I
[4 credit hours (4, 0, 0)]
Examines quantitative and qualitative research methodologies. Includes critical analysis of occupational therapy research. Explores areas of possible research interest with guidance from potential major advisors. Fall Prerequisite: Admission to the OTD Program
Term Offered: Fall

OCCT 7210 OT Advocacy I
[2 credit hours (2, 0, 0)]
Explores the role of occupational therapist as educator. Examines educational theory, instructional methods and technology, and evaluation of teaching effectiveness with patients, families, peers, supervises, and community groups. Fall Prerequisite: Admission to OTD Program
Term Offered: Fall

OCCT 7220 OT Advocacy II
[2 credit hours (0, 0, 0)]
Applies teaching principles as students assume the role of educators to the community. Explores the role of the therapist in design, development, implementation, and evaluation of occupational therapy curricula. Integrates presentation of self and professionalism. Summer Prerequisite: Occupational Therapy Advocacy I
Term Offered: Summer

OCCT 7310 FW and Professional Dev I
[1 credit hour (0, 0, 0)]
Introduces Level I and Level II Fieldwork, and the Capstone Experience, including policy, procedures, and documentation and the portfolio assignment. Defines professional behavior and health care communication. Encourages discussion of Level I fieldwork experiences. Includes Level I fieldwork experience. Prerequisite: Admission to the OTD Program
Term Offered: Fall

OCCT 7320 FW and Professional Dev II
[1 credit hour (0, 0, 0)]
Emphasizes interviewing clients for an occupational profile. Encourages discussion of Level I fieldwork experiences. Introduces the course sequence of the Capstone Experience. Includes Level I fieldwork experience. Prerequisite: Fieldwork and Professional Development Seminar I
Term Offered: Spring

OCCT 7330 FW and Professional Dev III
[1 credit hour (0, 0, 0)]
Introduces Capstone Seminar opportunities in teaching, research, program development, or clinical practice. Introduces Capstone Manual and structure for planning the individualized Capstone Experience. Provides a forum for discussion fieldwork experiences. Summer Prerequisite: Fieldwork and Professional Development Seminar II
Term Offered: Summer

OCCT 7400 Conditions in OT
[2 credit hours (2, 0, 0)]
Reviews the physical and mental health conditions that challenge successful and satisfying occupational performance, with an emphasis on the aspects of medical management and rehabilitation relevant to the role of the occupational therapist. Spring Prerequisite: Occupational Therapy Advocacy I
Term Offered: Spring

OCCT 7510 Orientation to Interprofessional Teaming
[1 credit hour (0, 0, 1)]
Orientation to the Graduate Certificate in Teaming in Early Childhood. Focus on individual competencies needed to work collaboratively to meet the needs of young children with disabilities and their families. Prerequisites: SPED 5270 with a minimum grade of D-
Term Offered: Summer

OCCT 7620 Leadership and Advocacy in Interprofessional Teaming
[1 credit hour (0, 0, 1)]
This second seminar in the Graduate Certificate in Teaming in Early Childhood focuses on skills and policies that promote best practices in teaming to support young children with disabilities. Prerequisites: SPED 5270 with a minimum grade of D- and OCCT 7610 with a minimum grade of D-
Term Offered: Summer, Fall

School of Exercise and Rehabilitation Sciences
OCCT 7630 Evidence-Based Practice and Innovation in Interprofessional Teaming
[1 credit hour (0, 0, 1)]
This third seminar in the Graduate Certificate in Teaming in Early Childhood provides students the opportunity to reflect on their practicum experiences in teaming to support young children with disabilities.
Prerequisites: OCCT 7620 with a minimum grade of D-
Corequisites: OCCT 7640
Term Offered: Spring, Summer

OCCT 7640 Practicum in Interprofessional Teaming
[2 credit hours (0, 0, 2)]
The practicum is provides an opportunity to engage in interprofessional teaming in order to provide integrated services to young children with special needs in an inclusive setting.
Prerequisites: OCCT 7620 with a minimum grade of D-
Corequisites: OCCT 7630
Term Offered: Fall, Spring, Summer

OCCT 8050 OT Models of Practice V
[5 credit hours (5, 5, 0)]
Advances clinical reasoning for occupational therapy practice to support occupational performance throughout the lifespan, including prevention of occupational impairment. Prerequisite: Occupational Therapy Models of Practice IV Co-requisite: Occupational Therapy Models of Practice VI
Term Offered: Fall, Spring

OCCT 8060 OT Models of Practice VI
[4 credit hours (4, 4, 0)]
Examines compensation-oriented models of practice including assistive technology, positioning, patient handling, and mobility. Presents occupational and non-occupational assessments and interventions for prevention, adaptation, and compensation. Prerequisite: Occupational Therapy Models IV Co-requisite: Occupational Therapy Models of Practice VI
Term Offered: Fall

OCCT 8070 OT Models of Practice VII
[4 credit hours (0, 4, 0)]
Examines contemporary and possible models of practice emphasizing wellness, health promotion, community care, population-based intervention and other emerging trends. Provides students with leadership experiences in program development. Prerequisite: Occupational Therapy Models of Practice VI Corequisite: Occupational Therapy Models of Practice VIII
Term Offered: Spring

OCCT 8080 OT Models of Practice VIII
[3 credit hours (0, 3, 0)]
Models of practice emphasizing group occupational forms, group process, and therapeutic use of self in groups. Involves practice in assessment and intervention with persons experiencing both physical and mental health conditions. Prerequisite: Occupational Therapy Models of Practice VI Co-requisite: Occupational Therapy Models of Practice VII
Term Offered: Spring

OCCT 8120 Research in OT II
[3 credit hours (0, 0, 0)]
Provides structure for student, guided by faculty mentor, to define a research question, investigate the literature, explore the site(s) for data collection, and prepare preliminary research proposal. Involves individual faculty contact. Spring Prerequisite: Research in Occupational Therapy I
Term Offered: Spring

OCCT 8130 Research in Occ Therapy III
[3 credit hours (0, 3, 0)]
Provides structure for student to begin data collection after obtaining official approval of project by major advisor and institutional review board. Involves individual faculty contact. Fall, Spring, Summer
Prerequisite: Research in Occupational Therapy II
Term Offered: Spring, Fall

OCCT 8140 Research in OT IV
[3 credit hours (0, 0, 0)]
Includes completion of data collection, analysis of results, submission of approved final project in journal article format, and formal presentation of the research project. Involves individual faculty contact. Fall, Spring, Summer
Prerequisite: Research in Occupational Therapy III
Term Offered: Spring, Summer, Fall

OCCT 8230 OT Advocacy III
[2 credit hours (2, 0, 0)]
Identifies advocacy issues relevant to occupational therapy and introduces community resources that can enhance successful and satisfying reintegration back into home, school, work, and/or community. Explores legislation and ethical issues that influence health care provision. Fall Prerequisite: Occupational Therapy Advocacy II
Term Offered: Fall

OCCT 8240 OT Advocacy IV
[3 credit hours (3, 0, 0)]
Examines leadership, management, and supervision of occupational therapy services in a dynamic health care system. Addresses legislative, regulatory, and payment issues affecting program development. Encourages leadership development. Spring Prerequisite: Occupational Therapy Advocacy III
Term Offered: Spring

OCCT 8340 FW and Professional Dev IV
[1 credit hour (0, 0, 0)]
Addresses communication with children, family members, and health care professionals; ethics and safety; and cultural diversity. Students identify Capstone Practicum sites, site mentor(s), and the faculty mentor. A forum for discussion of Level I fieldwork experiences is provided. Level I fieldwork experience is included. Prerequisite: Fieldwork and Professional Development Seminar II
Term Offered: Fall

OCCT 8350 FW and Professional Dev V
[3 credit hours (0, 3, 0)]
Addresses issues of clinical supervision; Level II fieldwork policy, procedures, and documentation; and professional development. A forum for discussion of Level I fieldwork experiences is provided. Students develop a comprehensive Capstone Proposal. Includes Level I fieldwork experience. Prerequisite: Fieldwork and Professional Development Seminar IV
Term Offered: Spring
OCCT 8360 Fieldwork Level II
[3 credit hours (0, 0, 3)]
Provides a 12-week, full-time, supervised fieldwork experience where students refine entry-level abilities to integrate occupational therapy theory, research, and practice under supervision and with collaboration of the academic institution. An on-line forum for discussion of Level II fieldwork experiences is provided. Prerequisite: OCCT 8360 and completion of academic content except research, which may be taken concurrently
Term Offered: Spring, Summer, Fall

OCCT 8370 Fieldwork Level II
[6 credit hours (0, 0, 0)]
Provides a 12-week, full-time, supervised fieldwork experience where students refine entry-level abilities to integrate occupational therapy theory, research, and practice under supervision and with collaboration of the academic institution. An on-line forum for discussion of Level II fieldwork experiences is provided. Prerequisite: OCCT 8360 and completion of academic content except research, which may be taken concurrently
Prerequisites: OCCT 8360 (may be taken concurrently) with a minimum grade of D-
Term Offered: Spring, Summer, Fall

OCCT 8380 Capstone Practicum
[6 credit hours (0, 0, 0)]
Students develop skills in teaching, research, program development, advocacy or clinical practice with mentorship by faculty and on-site practitioners. This course, in combination with OCCT 8900 and OCCT 8910 requires documentation of 560 hours. Prerequisite: Level II FW, competency exam, all courses except research
Corequisites: OCCT 8900, OCCT 8910
Term Offered: Spring, Summer, Fall

OCCT 8400 Phys Agent Mod and Non Occ Met
[2 credit hours (2, 0, 0)]
Addresses non-occupational methods including physical agent modalities and technology used with medically complex patients. Covers scientific underpinnings and regulatory guidelines for appropriate use of physical agent modalities in occupational therapy. Summer Prerequisite: Occupational Models of Practice VI
Term Offered: Summer

OCCT 8800 Independent Study OT
[0-12 credit hours (0, 0, 0)]
Intensive study in a field of interest, including theoretical and experimental work. May be repeated for credit. Prerequisite: Admission to OTD program or consent of instructor Fall, Spring, Summer
Term Offered: Summer

OCCT 8900 Mentored Capstone Dissemination
[3 credit hours (0, 0, 0)]
Focuses on individualized issues arising in the Capstone Practicum. Involves mentorship by site and faculty practitioners and culminates in a paper and a presentation dealing with a specific area within occupational therapy. Spring Prerequisite: Level II fieldwork and completion of academic content except research, which may be taken concurrently Co-requisites: Mentored Studies in Capstone Area or approved elective and Capstone Practicum
Term Offered: Spring, Summer, Fall

OCCT 8910 Mentored Studies:Capstone Area
[3 credit hours (0, 0, 0)]
Focuses on mastery of literature and in-depth knowledge of an area within occupational therapy through exploration of library, electronic, and clinical resources. Lends theoretical and research support to the Capstone Practicum. Spring Prerequisite: Level II fieldwork and completion of academic content except research, which may be taken concurrently Co-requisites: Mentored Capstone Dissemination and Capstone Fieldwork Practicum
Term Offered: Spring, Summer, Fall

PHYT 5000 Gross Anatomy
[4 credit hours (4, 0, 0)]
Students will study the structure of the human body using the struction-function relationship as the course paradigm. Musculoskeletal, vascular, and peripheral nervous system anatomy will be emphasized, as will the coordinated role of these structures, both locally and regionally, in producing movement of the axial skeleton and extremities. Competencies serve as a foundation for clinical science coursework, particularly in the musculoskeletal and neuromuscular areas of practice.
Term Offered: Summer

PHYT 5020 Lifespan I
[2 credit hours (0, 0, 0)]
The first of two, this course examines typical lifespan development from birth to adolescence. Emphasis is on theoretical constructs, gross motor development, physical therapy examination, diagnosis, prognosis and evaluation of findings. Also includes an overview of fine motor development, cognitive development, reflex development, interaction with families, public laws and child abuse.
Term Offered: Summer

PHYT 5050 Analysis of Movement
[4 credit hours (4, 0, 0)]
This course is an integrated study of applied biomechanics, kinesiology, and anatomy as they relate specifically to the analysis of human movement. Observational skills will be emphasized for analysing human movement, although students will be introduced to the use of other evaluation tools such as EMG motion analysis, and videography. Progressing from simple movements to those that are more complex and from normal to pathological, students will learn to integrate observational skills with an understanding of musculoskeletal function and neuromuscular control. Using cases of pathological conditions student will practice hypothesis generation and identification of examination data necessary for effective clinical reasoning. PhyT500 Gross Anatomy is a prerequisite and provides a foundation for the objectives this course hopes to achieve.
Prerequisites: PHYT 5000 with a minimum grade of D- or PHYT 500 with a minimum grade of D-
Term Offered: Fall
PHYT 5090 Neuroscience  
[5 credit hours (5, 3, 0)]  
An introduction to the nervous system, including fundamental concepts in neuroanatomy and neurophysiology as they relate to human movement and basic bodily function mediated by the central and peripheral nervous systems. Emphasis is placed on the effects of neurological conditions (disease, injury, mental illness) relevant to physical therapy and functional performance. Basic clinical assessment skills of neurological impairments will integrate neuroscience information with clinical practice.  
Term Offered: Spring

PHYT 5110 Clinical Pathophysiology I  
[1 credit hour (1, 0, 0)]  
Integrated study of physiological and pathophysiological processes that influence the human body at the cellular, organ and systemic levels. Emphasis on mechanisms of and clinical manifestations of common diseases with discussion of potential impact on the delivery of PT services. Content to serve as the basis for discussion of pharmacology in subsequent courses.  
Term Offered: Summer

PHYT 5120 Clinical Pathophysiology II  
[3 credit hours (3, 0, 0)]  
Second of 2 courses that address the integrated study of normal physiological and pathophysiological processes in human body at cellular, organ, and systemic levels - emphasises on clinical manifestations and impact on PT plan of care.  
Term Offered: Fall

PHYT 5170 Evidence Based Practice I  
[2 credit hours (0, 0, 0)]  
Introduction to the principles of measurement and research design, with an emphasis on critically evaluating the design of research studies relevant to clinical practice.  
Term Offered: Spring

PHYT 5180 Evidence Based Practice II  
[2 credit hours (0, 0, 0)]  
The second of a two course series on the principles of measurement and research design, with an emphasis on the statistical analysis procedures commonly used in clinical research. The critical evaluation and analysis of research studies relevant to clinical practice will also be emphasized.  
Term Offered: Summer

PHYT 5270 Applied Exercise Physiology  
[3 credit hours (0, 0, 0)]  
Exploration of exercise physiology principles as related to promotion of PT patients/clients' health and wellness. Emphasizes physiological and biochemical changes with exercise/training and exercise testing and prescription for PT patients/clients.  
Term Offered: Spring

PHYT 5280 Therapeutic Interventions I  
[2 credit hours (0, 0, 0)]  
The theory and practice of physical therapy in the acute care setting as it relates to improvement of functional mobility, prevention of complications, and preparation for next level of care.  
Term Offered: Spring

PHYT 5290 Therapeutic Interventions II  
[2 credit hours (2, 0, 0)]  
Study of the theoretical basis for, and the application of thermal, mechanical, and electrical modalities used for the PT management of clients. Emphasis is on evidence-based practice, critical thinking, and clinical decision-making using a case-based format, and review of the scientific literature will be used in determining the most appropriate use of modalities within a comprehensive PT plan of care.  
Term Offered: Summer

PHYT 5300 Principles of Therapeutic Exer  
[2 credit hours (2, 0, 0)]  
Application of scientific principles in anatomy, applied biomechanics, and exercise physiology to develop sound therapeutic exercise procedures. Emphasis on development of skills associated with therapeutic exercise for patients with musculoskeletal and/or general movement dysfunction. Students will learn how to use and apply a variety of common fitness and rehabilitation exercise apparatus and develop appropriate PT treatment plans that include exercise for a given patient problem.  
Term Offered: Spring

PHYT 5350 Intro to Examination  
[2 credit hours (0, 0, 0)]  
Introduction to the physical examination process, including history-taking, systems review and screening. Emphasis on basic PT examination skills of the cardiovascular, musculoskeletal, and integumentary systems. Skills include: assessment of tolerance to functional activity (vital signs), posture, pain, peripheral pulses and edema; goniometry; and strength testing.  
Term Offered: Fall

PHYT 5450 Foundations of PT  
[2 credit hours (0, 0, 0)]  
Addresses the professional socialization process. Professional codes and guides of behavior will be discussed in relation to delivery of competent, ethical, legal and compassionate PT services. Topics include: therapeutic communication, cultural competency, stress management and conflict resolution. Introduction to basic principles of teaching and learning for the role of educator is included.  
Term Offered: Fall

PHYT 5561 Orientation to Interprofessional Teaming  
[1 credit hour (0, 0, 1)]  
Orientation to the Graduate Certificate in Teaming in Early Childhood. Focus on individual competencies needed to work collaboratively to meet the needs of young children with disabilities and their families.  
Prerequisites: SPED 5270 with a minimum grade of D-  
Term Offered: Summer

PHYT 5562 Leadership and Advocacy in Interprofessional Teaming  
[1 credit hour (0, 0, 1)]  
This second seminar in the Graduate Certificate in Teaming in Early Childhood focuses on skills and policies that promote best practices in teaming to support young children with disabilities.  
Prerequisites: SPED 5270 with a minimum grade of D- and PHYT 5610 with a minimum grade of D-  
Term Offered: Summer, Fall
PHYT 5630 Evidence-Based Practice and Innovation in Interprofessional Teaming
[1 credit hour (0, 0, 1)]
This third seminar in the Graduate Certificate in Teaming in Early Childhood provides students the opportunity to reflect on their practicum experiences in teaming to support young children with disabilities.
Prerequisites: SPED 5270 with a minimum grade of D- and PHYT 5610 with a minimum grade of D- and PHYT 5620 with a minimum grade of D-
Corequisites: PHYT 5640
Term Offered: Spring, Summer

PHYT 5640 Practicum in Interprofessional Teaming
[2 credit hours (0, 0, 2)]
The practicum is provides an opportunity to engage in interprofessional teaming in order to provide integrated services to young children with special needs in an inclusive setting.
Prerequisites: PHYT 5620 with a minimum grade of D-
Corequisites: PHYT 5630
Term Offered: Spring, Summer

PHYT 5650 Pharmacology of PT
[1 credit hour (0, 0, 0)]
Integrated study of pharmacology that presents the pharmacodynamics and pharmacotherapeutics of common classes of drugs. Drugs covered include: anti-inflammatory, analgesic, muscle relaxant, psychotropic, anti-microbial, and diabetic medications. Emphasis on indications, contraindications, adverse drug reactions, and the implications for physical therapy care.
Term Offered: Summer

PHYT 5750 Clinical Reasoning
[1 credit hour (0, 0, 0)]
Introduction to theoretical models that guide clinical decision making, including patient management, clinical reasoning, disablement, and evidence-based practice models. Documentation will be discussed as a tool to aid clinical reasoning.
Term Offered: Fall

PHYT 5850 Integrated Clinical Experience I
[2 credit hours (0, 0, 0)]
The first of two full-time, integrated clinical education experiences. Students are engaged in clinical observation and supervised practice in a 4 week clinical education experience completed at the end of the first year of the DPT program. This course emphasizes the development of beginning skills in patient management, safety, clinical reasoning, and professional conduct in various clinical practice settings.
Term Offered: Spring

PHYT 5860 Clinical Practicum II
[1 credit hour (0, 0, 0)]
Clinical observation and supervised application of advancing physical therapy skills at the same clinical facility as Clinical Practicum I. An emphasis will be on continued progression in the generic abilities and a more focused approach toward the development of specific technical, cognitive or affective areas in need of improvement as identified during Clinical Practicum I.
Term Offered: Summer

PHYT 5900 Medical Imaging
[2 credit hours (2, 0, 0)]
This course provides the student with the tools needed to interpret information obtained from the radiology report and apply it to management of the physical therapy patient. Musculoskeletal imaging is emphasized, but imaging for other body systems is also addressed. This course strengthens the student’s competency to perform a comprehensive patient evaluation, establish a diagnosis and prognosis, develop a physical therapy plan of care, and to communicate and collaborate with other health care providers.
Term Offered: Summer

PHYT 6020 Lifespan II
[2 credit hours (0, 0, 0)]
The principles of normal aging including the physiological, functional, and psychosocial changes associated with aging, and a review of diseases and disorders common to the aging population.
Term Offered: Spring

PHYT 6050 Hlth Care Policy and Delivery
[1 credit hour (0, 0, 0)]
Overview of the origins and components of the American health care system and major policy initiatives that influence it. Access, cost, and quality factors in health care delivery will be explored. Serves as a starting point for the student’s study of the continuously expanding sector of the American economy in which they will practice.
Term Offered: Spring, Fall

PHYT 6100 Health Promotion
[2 credit hours (2, 0, 0)]
Discussion and application of the elements of health and wellness as described by Healthy People 2010. Emphasis on health assessment, obesity, physical activity, nutrition, complementary/alternative management, and behavior modification strategies.
Term Offered: Fall

PHYT 6170 Scholarly Project I
[2 credit hours (0, 0, 0)]
The student will initiate the formal research process through refinement of a research/scholarly project proposal and, if necessary, submission of the proposal to the Institutional Review Board for human subjects for approval.
Term Offered: Fall

PHYT 6180 Scholarly Project II
[2 credit hours (0, 0, 0)]
Includes completion of data collection, analysis of the data, and initial preparation of a scholarly paper, in accordance with specific manuscript guidelines.
Term Offered: Spring

PHYT 6190 Scholarly Project III
[1 credit hour (0, 0, 0)]
Includes the final preparation of a scholarly paper which must meet the guidelines established by the College of Graduate Studies, and the oral defense/presentation of the scholarly project as required by the College of Graduate Studies.
Term Offered: Summer, Fall
PHYT 6260 Cardiovascular-Pulmonary PT
[3 credit hours (0, 0, 0)]
Integrative study of the role of PT in interdisciplinary management of patients with cardiovascular and/or pulmonary dysfunction. Application of skills associated with PT examination, evaluation, diagnosis, prognosis and interventions for patients with CV-P dysfunction.
Term Offered: Fall

PHYT 6460 Teaching and Learning
[2 credit hours (0, 0, 0)]
Study of a physical therapist's role as educator of peers, patients and families, community members, and students in the clinical setting. Emphasis on instructional design, instructional strategies, teaching methods, and evaluation of learning.
Term Offered: Fall

PHYT 6500 Musculoskeletal Rehab I
[3 credit hours (0, 0, 0)]
First of two courses, focused on the synthesis of principles of pathophysiology and screening and examination of musculoskeletal system. Emphasis on pertinent special examination techniques, principles of evaluation, PT diagnosis and prognosis, and intervention for the upper and lower extremities. Case-based discussion of role of common M-S pharmacological management, radiographic procedures and findings, and interpretation of special tests for diagnostic purposes.
Term Offered: Fall

PHYT 6510 Musculoskeletal Rehab II
[3 credit hours (0, 0, 0)]
Second of two courses, continued discussion of the principles of pathophysiology and musculoskeletal examination, evaluation, PT diagnosis and prognosis, and intervention. Emphasis on spine and lower quarter biomechanical examination and evaluation as it relates to lumbopelvic dysfunction. Includes discussion of: pharmacological management of inflammation and pain, and synthesis of radiological findings (radiographs, MRI, CT scans), as they relate to rendering PT diagnosis and prognosis.
Term Offered: Spring

PHYT 6600 Neuromuscular Rehab I
[3 credit hours (0, 0, 0)]
Theories and principles of client examination, evaluation, PT diagnosis, prognosis, and therapeutic intervention for clients with stroke and spinal cord injury. Historic and modern evidence-based treatment approaches for the neurologic patient, in general, will be discussed with emphasis on the approach's influence in the design of a PT plan of care.
Term Offered: Fall

PHYT 6610 Neuromuscular Rehab II
[3 credit hours (0, 0, 0)]
Second course in the series on rehabilitation of patients with neuromuscular diagnoses, including amputations, and neurodegenerative diseases. Emphasis on theories, philosophies, and the PT plan of care including examination, evaluation, and intervention strategies. Prostheses and orthoses prescription, application and training included.
Term Offered: Spring

PHYT 6620 Pediatric Rehabilitation
[2 credit hours (0, 0, 2)]
Principles of rehabilitation for pediatric clients with neuromuscular impairments and developmental disabilities. Preparation for physical therapy practice in pediatric settings using interdisciplinary family-centered practice; normal and abnormal development, standardized assessment, service-delivery settings, interventions, management strategies specific to pediatrics. Emphasis on essential pediatric core competencies and the PT Management including examination, evaluation, diagnosis/prognosis, and intervention strategies.
Term Offered: Spring

PHYT 6700 Professional Issues
[1 credit hour (1, 0, 0)]
Prerequisite: PHYT685 Discussion of current events and issues faced by the profession of physical therapy as identified by the APTA and other pertinent sources, and as encountered during clinical education experiences.
Term Offered: Fall

PHYT 6720 Special Topics in PT
[2 credit hours (0, 0, 0)]
Intensive exploration of a topic related to the profession of physical therapy and designed to meet the student's special interest and professional goals. Subject matter will vary depending upon student interest.
Term Offered: Spring, Fall

PHYT 6740 Clinical Seminar I
[1 credit hour (0, 0, 1)]
First of a series of two courses, this course emphasizes the application of clinical skills learned in didactic coursework and begins to develop problem-solving and critical thinking for a variety of diagnoses and practice settings using a variety of patient scenarios. An emphasis is placed on evidence-based decision-making, basic evaluation, intervention planning, as well as beginning evaluation of one's own clinical reasoning processes and skills.

PHYT 6750 Clinical Seminar II
[1 credit hour (0, 0, 0)]
The second of a series of two courses, this course emphasizes the application of clinical skills and the integration of problem-solving and critical thinking for a variety of diagnoses and practice settings using a variety of patient scenarios. An emphasis is placed on evidence-based decision-making, comprehensive evaluation, progressive intervention planning, and evaluation of one's own clinical reasoning processes and skills.
Term Offered: Spring

PHYT 6850 Integrated Clinical Experience II
[5 credit hours (0, 0, 0)]
The second of two full-time, integrated clinical education experiences. Students are engaged in clinical observation and supervised practice in a 10 week clinical education experience completed at the end of the second year of the DPT program. This course emphasizes the development of intermediate skills in patient management, safety, clinical reasoning, and professional conduct in an inpatient or outpatient practice setting.
Term Offered: Summer
PHYT 6990 Independent Study in PT
[0-4 credit hours (0, 0, 0)]
In-depth exploration and study of clinically related problems or topic of interest. May be repeated for credit.
Term Offered: Spring, Summer, Fall

PHYT 7050 Practice Management
[2 credit hours (0, 0, 0)]
Examination of management and supervisory issues encountered in contemporary physical therapy practice. Discussion will include identification, analysis, and resolution of issues that compromise the delivery of effective and efficient PT services in a variety of practice settings. Topics include: organizational structure and behavior, human resources, finance and operations management, and marketing.
Term Offered: Spring, Fall

PHYT 7100 Integrated Patient Management
[3 credit hours (3, 0, 0)]
This integrative course emphasizes comprehensive patient management using the International Classification of Function model. This course focuses on the PT examination, evaluation, diagnosis, prognosis, and plan of care for patients with complex movement dysfunctions involving multiple body systems, managing clinical ambiguity, and determining need for referral.
Prerequisites: PHYT 685 with a minimum grade of D- or PHYT 6850 with a minimum grade of D-
Term Offered: Fall

PHYT 7200 Scholarly Project IV
[1 credit hour (0, 0, 0)]
The course includes the final preparation of a scholarly paper including the oral defense/presentation and submission of the final paper to the Department of Physical Therapy.
Prerequisites: PHYT 617 with a minimum grade of D- or PHYT 6170 with a minimum grade of D-
Term Offered: Spring, Fall

PHYT 7300 Advanced Therapeutic Exercise
[2 credit hours (1, 1, 0)]
This course will provide students with the opportunity to build upon their knowledge of principles of therapeutic exercise from previous courses and clinical education. Students will use advanced biomechanics and exercise physiology concepts to develop advanced therapeutic exercise for trunk stabilization, plyometrics, pelvic floor training, aquatic therapy, lymphedema, and sport-specific functional training. Students will further their skills in exercise dosage and progression, setting goals, and identifying most appropriate outcome measures.
Term Offered: Fall

PHYT 7320 Medical Screening
[1 credit hour (1, 0, 0)]
Preparation to work within a collaborative medical model and application of threshold detection to recognize to identify impairments or “red flags” in medical screening that warrant contact with a physician or other health care provider. Patient cases illustrate important medical screening principles. Emphasis on an examination scheme to promote efficient, effective patient data collection and professional communication with patients, physicians and other health providers.
Term Offered: Spring, Fall

PHYT 7620 Trauma Rehab
[2 credit hours (0, 0, 0)]
Integrated study of the principles of rehabilitation for clients who have sustained substantial trauma including, but not limited to: TBI, multiple fractures and burns. Students will be asked to integrate previous coursework in making decisions regarding the role of PT in the interdisciplinary management throughout the continuum of care for clients who have multi-system impairments due to physical trauma.
Prerequisites: Upper Division with a score of 1
Term Offered: Fall

PHYT 7890 Internship I
[5 credit hours (0, 0, 5)]
The first of two full-time, supervised internships completed following the culmination of the didactic portion of the DPT program. Students are engaged in supervised practice in a 10 week internship that emphasizes development toward entry-level PT competencies in all the components of professional practice and patient management in an inpatient or outpatient practice setting.
Term Offered: Spring, Fall

PHYT 7900 Internship II
[6 credit hours (0, 0, 0)]
The final full-time, supervised internship completed following the culmination of the didactic portion of the DPT program. Students are engaged in supervised practice in a 12 week internship that emphasizes development of entry-level PT competencies in all the components of professional practice and patient management in various clinical practice and specialty settings.
Term Offered: Spring

RCRT 5100 Community Event Planning
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the event planning process including: risk and risk management, ethics, inclusivity, planning, budgeting, organizing, location selection, travel logistics, venue and guest requirements, marketing, and food and beverage considerations.
Term Offered: Summer, Fall

RCRT 5200 Planning and Promotion of Sport
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the principles of marketing and delivery of services associated with intercollegiate athletics, professional, and multi-sport club operations, facilities and management of resources. This course also examines motivation and behavior of sports tourists.
Term Offered: Fall
RCRT 5300 Recreation And Adaptation For Special Education
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the principal of inclusion and major legislation that impacts the provision and delivery of recreational services for individuals with disabilities.
Term Offered: Spring, Fall

RCRT 5310 Leisure And Popular Culture
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of leisure theory, philosophy, and behavior and its application to the delivery of leisure services within contemporary culture.
Term Offered: Fall

RCRT 5320 Administration In Recreation And Recreational Therapy
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the administrative functions of delivering recreation and therapeutic recreation services. Students will master and apply the aspects of management principles including ethics, legislation, technology, quality management, risk management, financial and human resources, marketing, and accreditation.
Term Offered: Spring, Fall

RCRT 5340 Leisure, Recreation And Aging
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the impacts of aging on leisure and recreation behavior and activity during middle and later adulthood by investigating the aging process, leisure across the lifespan, and the impact of leisure and recreation on quality of life and wellness.
Term Offered: Spring, Fall

RCRT 5410 Facility Planning and Design
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of, and ability to apply, the principles of design and the site design process to the development of recreation-based facilities. Specific areas of the design process presented include: tools of the trade, functional and aesthetic considerations, research, regional and site analysis, programming, final design development, construction, management, and evaluation.
Term Offered: Spring

RCRT 5420 Leisure Program Research Techniques
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of, and ability to apply, the basic components of research in the academic and professional practice setting including: ethics, human subject protection, research concepts, topic identification, theoretical roots, literature review development, sample selection, methodologies, instrument testing, data collection and analysis procedures, and research reporting.
Term Offered: Spring, Fall

RCRT 5610 Adventure Programming in Recreation and Recreation Therapy
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of, and ability to apply, theories and techniques of adventure programming as a treatment protocol and/or leisure education tool. Outdoor trips required.
Term Offered: Spring, Fall

RCRT 5620 Animal Assisted Therapy
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using a variety of animal-assisted modalities.
Term Offered: Spring, Fall

RCRT 5630 Therapeutic Activities
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using a variety of games, humor and play modalities.
Term Offered: Spring, Fall

RCRT 5640 Rt Intervention: Therapeutic Groups
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using therapeutic group techniques and processes as a modality.
Term Offered: Spring, Fall

RCRT 5650 Relaxation And Stress Management
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using relaxation and stress management techniques as a modality.
Prerequisites: (RCRT 1310 with a minimum grade of D- and RCRT 4720 with a minimum grade of D-)

Term Offered: Spring, Fall

RCRT 5660 Rt Intervention: Leisure Education
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using leisure education activities, including: social skills, values clarification, leisure awareness, resources and knowledge. Minimum
Term Offered: Spring, Fall

RCRT 5670 Rt Intervention: Assistive Technology & Techniques
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes utilizing assistive technology, techniques, and resources in therapeutic settings.
Term Offered: Spring, Fall

RCRT 5680 Rt Intervention: Aquatic Therapy
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes utilizing swimming, evidence-based aquatic programming methods, and resources.
Term Offered: Spring, Summer, Fall

School of Exercise and Rehabilitation Sciences
RCRT 5720 Introduction To Therapeutic Recreation
[3 credit hours (3, 0, 0)]
This course is designed to introduce graduate students who do not have a background in therapeutic recreation to the theories, models, principles, and history of therapeutic recreation service. Through lectures, discussions and self-directed learning activities, the student will examine the structure and function of therapeutic recreation processes in a variety of treatment settings.
Term Offered: Spring, Fall

RCRT 5730 Medical & Clinical Aspects Of Therapeutic Recreation  
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of health-related conditions or disabilities related to physical, neurological, sensory and metabolic impairments across the lifespan. Uses of pharmacological interventions, family involvement, programming, and other implications impacting Therapeutic Recreation practice are examined.
Term Offered: Fall

RCRT 5750 Group Dynamics In Recreational Therapy
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding, and ability to apply, concepts and theories of the therapeutic group process as applicable to professional practice. Students will be introduced to and practice: facilitation skills, behavior modification techniques, and effective communication and leadership skills.
Term Offered: Spring, Fall

RCRT 5760 APIE in Recreation Therapy
[3 credit hours (3, 0, 0)]
This course addresses the procedures and processes of assessment, planning, implementation and evaluation of recreation therapy services.

RCRT 5790 Medical & Clinical Aspects Of Therapeutic Recreation II
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of health-related conditions or disabilities related to intellectual and developmental disabilities and psychological impairments across the lifespan. Uses of pharmacological interventions, family involvement, programming, and other implications impacting Therapeutic Recreation practice will be examined.
Term Offered: Spring

RCRT 5800 Clinical: Physical Rehabilitation
[1 credit hour (0.5, 0, 4)]
This course requires a 50-hour practicum experience in a community agency. The practicum experience provides the student a structured environment to apply the APIE(D) process with a physical rehabilitation population.
Term Offered: Spring, Summer, Fall

RCRT 5810 Clinical: Psychiatric Rehabilitation
[1 credit hour (0.5, 0, 4)]
This course requires a 50-hour practicum experience in a community agency. The practicum experience provides the student a structured environment to apply the APIE(D) process with a psychiatric rehabilitation population.
Term Offered: Spring, Fall

RCRT 5820 Clinical: Mental Retardation/Developmental Disability
[1 credit hour (0.5, 0, 4)]
This course requires a 50-hour practicum experience in a community agency. The practicum experience provides the student a structured environment to apply the APIE(D) process with an ID/DD rehabilitation population.
Term Offered: Spring, Fall

RCRT 5830 Clinical: Geriatric
[1 credit hour (0.5, 0, 4)]
This course requires a 50-hour practicum experience in a community agency. The practicum experience provides the student a structured environment to apply the APIE(D) process with a geriatric population.
Term Offered: Spring, Fall

RCRT 5840 Clinical: Cardiac Rehabilitation
[1 credit hour (0.5, 0, 4)]
This course requires a 50-hour practicum experience in a community agency. The practicum experience provides the student a structured environment to apply the APIE(D) process with a cardiac rehabilitation population.
Term Offered: Spring, Fall

RCRT 5850 Clinical: Orthopedic Rehabilitation
[1 credit hour (0.5, 0, 4)]
This course requires a 50-hour practicum experience in a community agency. The practicum experience provides the student a structured environment to apply the APIE(D) process with an orthopedic rehabilitation population.
Term Offered: Spring, Fall

RCRT 5860 Therapeutic Fitness
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using therapeutic fitness modalities.
Term Offered: Spring

RCRT 5870 Program Planning In Recreational Therapy
[3 credit hours (3, 0, 0)]
This course requires the graduate student to apply cumulative knowledge of the APIE(D) process through designing evidence-based: treatment programs, program evaluations, protocols and treatment plans in recreation therapy practice.
Term Offered: Spring, Fall

RCRT 5900 Rt Intervention: Craft Therapy
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using craft therapy modalities.
Term Offered: Spring

RCRT 5910 Rt Intervention: Horticulture Therapy
[1 credit hour (0, 1, 0)]
This course provides the graduate student with advanced skill development needed to implement therapeutic outcomes using horticulture therapy modalities.
Term Offered: Spring

RCRT 5940 Internship In Recreation And Leisure
[1-6 credit hours (0, 0, 0-18)]
This course provides the graduate student with the opportunity to complete an internship under the supervision of a recreation professional in partial fulfillment for the MA degree in recreation and leisure studies.
Term Offered: Spring, Summer, Fall

RCRT 6000 Issues And Trends In Recreation/Recreational Therapy
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the issues and trends impacting the delivery of recreation and recreation therapy services in diverse professional settings.
Term Offered: Spring
RCRT 6020 Financial Resources Of Recreation And Recreational Therapy
[3 credit hours (3, 0, 0)]
This course provides the graduate student with an advanced understanding of the financial management concepts and resources supporting the delivery of recreation and recreation therapy services.
Term Offered: Summer

RCRT 6920 Master's Project In Recreation And Leisure
[1-4 credit hours (0, 0, 0-4)]
This course provides the graduate student with the opportunity to complete a Master's project under the supervision of a project committee in partial fulfillment for the MA degree in recreation and leisure studies.
Term Offered: Spring, Summer, Fall

RCRT 6940 Internship
[1-4 credit hours (0, 0, 0-12)]
This course provides the graduate student with the opportunity to complete an advanced internship under the supervision of a recreation professional in partial fulfillment for the MA degree in recreation and leisure studies.
Term Offered: Spring, Fall

RCRT 6960 Master's Thesis In Recreation And Leisure
[1-4 credit hours (0, 0, 0-4)]
This course provides the graduate student with the opportunity to complete a Master's Thesis under the supervision of a thesis committee in partial fulfillment for the MA degree in recreation and leisure studies.
Term Offered: Spring, Summer, Fall

RCRT 6990 Independent Study In Recreation And Leisure
[1-3 credit hours (0, 0, 0-3)]
This course provides the graduate student with the opportunity to develop an advanced independent learning experience in support of academic and/or professional interests.
Term Offered: Spring, Summer, Fall