DEPARTMENT OF HEALTH AND HUMAN PERFORMANCE

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Exercise and Sports Science

The Bachelor of Exercise and Sports Science (BESS) degree has several specializations that allow graduates to prepare for careers in education, exercise prescription, health professions, management of exercise programs, and coaching. The BESS with All-Level Physical Education (EC-12) Teacher Certification prepares graduates to teach in elementary and secondary schools. The BESS with a concentration in Clinical Exercise Science prepares graduates for careers in cardiopulmonary, clinical exercise physiology, and diagnostic testing and programming for cardiac rehabilitation and other special populations. The BESS with a concentration in Pre-Rehabilitation Sciences gives students a degree that is well aligned with entrance requirements of advanced study in health care and allied health professions like athletic training, physical therapy, occupational therapy, orthotics/prosthetics, chiropractics, or physician’s assistant. The BESS with a major in Health and Fitness Management and minor in Business Administration blends exercise science knowledge with the management and leadership skills needed to direct fitness and health/wellness programs in commercial, corporate, and institutional settings. Advanced course work and field experiences are required for graduation in these programs and depend on maintenance of GPAs above 2.5 or 2.75.

Public Health

The Public Health major will provide students with the breadth of knowledge, skills, and experiential learning for careers in public health. The purpose of the program is to facilitate development of knowledge and skills to promote health in public health settings (e.g. community, governmental, educational, healthcare) by using evidence-based practices to design, implement, and evaluate public health programs that impact individual behavior, community environments, and public policy. Graduates of this program play a vital role in health promotion teams given students a degree that is well aligned with entrance requirements of advanced study in health care and allied health professions like athletic training, physical therapy, occupational therapy, orthotics/prosthetics, chiropractics, or physician’s assistant. The BESS with a major in Health and Fitness Management and minor in Business Administration blends exercise science knowledge with the management and leadership skills needed to direct fitness and health/wellness programs in commercial, corporate, and institutional settings. Advanced course work and field experiences are required for graduation in these programs and depend on maintenance of GPAs above 2.5 or 2.75.

Recreation Administration

The Recreation Administration major combines classroom learning and on-the-job training in two career tracks: recreation administration and therapeutic recreation. Students study areas in recreation programming, leadership, marketing, evaluation, administration, and therapeutic recreation. Recreation Administration graduates work in camps, nursing homes, recreation centers, resorts, hospitals, rehabilitation facilities, fitness centers, and state and national parks. The program is nationally accredited in both recreation administration and therapeutic recreation. Graduates of this program are eligible to sit for certification examinations for National Council for Therapeutic Recreation Certification (CTRS) and/or the National Recreation and Park Association’s National Certification Board (CPRP).

PFW Service Courses

Several Texas State degree programs require Physical Fitness and Wellness (PFW) classes to give students knowledge, skills, and health-related benefits of physical activity. All students may elect to take PFW classes to learn new skills/activities, relieve stress, maintain health, and meet others with similar activity interests. All students may elect to take PFW 1301 (Behavioral and Social Dimensions of Physical Activity and Wellness) to satisfy their general education requirement in social and behavioral sciences. The PFW program provides a wide variety of activity classes that include sports, games, indoor or outdoor activities both on and off campus. PFW classes are for students of all ages, skill ranges, and abilities. Some PFW classes, however, are restricted to students who are involved in athletics, band, ROTC, and other organizations. Some off-campus classes have an additional activity fee appropriate for the instructor and facilities used. Contact the Director of the PFW Division if you have any questions about PFW classes.

Admittance to the Educator Preparation Program

The All-Level Physical Education Teacher Certifications requires formal admittance into the Educator Preparation Program by the Office of Educator Preparation (http://mycatalog.txstate.edu/undergraduate/education/office-of-educator-preparation). Please see http://www.education.txstate.edu/oep/ for current admittance requirements and procedures.

Admission Requirements

Athletic Training

1. The Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Students desiring admission must first declare the Athletic Training major and complete the preliminary requirements for the Athletic Training major at Texas State University in order to become eligible to be admitted to the Athletic Training Program cohort. Once per year, in June, following the completion of a year-long competitive admissions process, the top 20 ranked applicants are offered admission to the Athletic Training Program cohort. For more information, please refer to https://www.hhp.txstate.edu/Undergraduate-Programs/Athletic-Training.html.

2. Students admitted to the Athletic Training Program cohort must be committed to taking the Board of Certification's national examination, as well as the Texas Advisory Board of Athletic Trainers' state licensure examination during the last semester prior to graduation.

3. To be considered as a candidate for admission to the Athletic Training Program cohort, students must complete AT 1298, AT 2156, AT 2260, AT 2356, and BIO 2430 with grades of B or better, and:
   - Participate in the competitive admission process that includes the five prerequisite courses mentioned above, a completed application (due annually on April 1), and an admissions interview in early May.
   - Establish and maintain a minimum Texas State GPA of 2.75.
   - Complete 50 hours of directed Athletic Training observation as part of AT 1298 – Orientation to Athletic Training Education.
• Hold current Emergency Cardiac Care (ECC) certification in CPR/AED at the Professional Rescuer level.

4. The six-component objective formula used to rank applicants for admission to the AT Program cohort is available to view at https://www.hhp.txstate.edu/Undergraduate-Programs/Athletic-Training.html.

5. The required Technical Standards for the AT Program are available at the department website listed, in the AT 1298 Policy and Procedures Manual, and from the program director.

Bachelor of Exercise and Sports Science (B.E.S.S.)


• Major in Exercise and Sports Science (Pre-Rehabilitation Sciences Concentration) (http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/exercise-sports-science-prehab-sciences)


• Major in Health and Fitness Management (http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/health-fitness-management-business-administration-minor-bess)

Bachelor of Science (B.S.)

• Major in Athletic Training (http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/athletic-training-bs)

• Major in Public Health (http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/public-health-bs)

• Major in Recreation Administration (http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/recreation-administration-bs)

• Major in Recreation Administration (Therapeutic Recreation Concentration) (http://mycatalog.txstate.edu/undergraduate/education/health-human-performance/recreation-administration-concentration-therapeutic-recreation-bs)

Minors

• Coaching

• Exercise and Sports Science

• Public Health

• Recreation Administration

Subjects in this department include: AT (p. 2), ESS (p. 5), PFW (p. 8), PH, REC (p. 12)

Courses in Athletic Training (AT)

AT 1298. Orientation to Athletic Training Education.
Pre-Athletic Training majors will be introduced to the academic and clinical aspects of the CAATE accredited athletic training education program. The course is utilized as part of the rigorous student evaluation process before formal entrance into the athletic training education program.

2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hours.
Grade Mode: Standard Letter

AT 2156. Taping and Bandaging Athletic Injuries.
This course focuses on the use of taping, bracing, and bandaging techniques in the prevention and care of athletic injuries.

1 Credit Hour. 1 Lecture Contact Hour. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 2260. Acute Care of Injuries and Illnesses.
This course will address the knowledge and skills related to the immediate evaluation and specialized care of acute injuries and illnesses common in sports settings. Lectures and laboratory experiences are focused on key aspects of emergency sports health care, including the rapid assessment, resuscitation, packaging and transportation of injured patients. Must be admitted to the Pre-Athletic Training major to enroll.

2 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 2356. Prevention and Care of Athletic Injuries.
This course focuses on the theoretical and practical aspects of the prevention, treatment, and rehabilitation of athletic injuries.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

AT 2397. Clinical Experience in Athletic Training I.
This course addresses the topics of injury prevention and emergency management, integrated into a clinical education experience designed to assess professional behaviors, knowledge and skills, and clinical proficiency. This course combines didactic with clinical education experiences obtained under the supervision of a licensed preceptor at an on-campus clinical site. A minimum 2.75 Texas State GPA is required. Must be admitted to the Athletic Training Cohort.

3 Credit Hours. 2 Lecture Contact Hours. 15 Lab Contact Hours.
Grade Mode: Standard Letter

AT 2398. Clinical Experience in Athletic Training II.
This course integrates topics in advanced athletic injury evaluation and management into a clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills, and proficiency-based case simulations. This course combines didactic and clinical education experiences obtained under the supervision of a licensed preceptor at an on-campus clinical site. Prerequisite: AT 2397 with a grade of "C" or better and a minimum 2.75 Texas State GPA. Must be admitted to the Athletic Training Cohort.

3 Credit Hours. 2 Lecture Contact Hours. 15 Lab Contact Hours.
Grade Mode: Standard Letter
AT 2400. Functional Anatomy.
The students will learn to qualitatively analyze the movements of the human body while integrating musculoskeletal anatomy and neuromuscular physiology principles. Corequisite: BIO 2430.
4 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 3111. Clinical Assessment I Laboratory.
This laboratory will assist students in developing the psychomotor skills used in the clinical evaluation of injuries and illnesses involving the head and face, brain, cervical spine, upper extremity, thorax, and pulmonary and cardiovascular systems. Corequisite: AT 3311. Prerequisites: AT 2356 with a grade of "D" or better, and a 2.75 Texas State GPA.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 3112. Clinical Assessment II Laboratory.
This laboratory will assist students in developing the psychomotor skills used in the clinical evaluation of injuries and illnesses involving the lumbar spine and lower extremity injuries as well as abdomen, gastrointestinal, genitourinary, endocrine, dermatologic, and systemic illnesses. Corequisite: AT 3312. Prerequisite: AT 3111, AT 3311, and a 2.75 Texas State GPA.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 3126. Applied Laboratory of Upper Extremity Injuries.
This course will present a study and critical analysis of the anatomy, injury signs and symptoms, and specific tests used in the clinical evaluation of upper extremity injuries to the physically active individual. Must be admitted to the Athletic Training Program or Pre-Physical Therapy Concentration to enroll. Co-requisite: AT 3326.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Co-requisite(s): AT 3326
Grade Mode: Standard Letter

AT 3128. Applied Laboratory of Lower Extremity Injuries.
This course will present a study and critical analysis of the anatomy, injury signs and symptoms, and specific tests used in the clinical evaluation of lower extremity injuries to the physically active individual. Must be admitted to the Athletic Training Program or Pre-Physical Therapy Concentration to enroll. Co-requisite: AT 3328.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Co-requisite(s): AT 3328
Grade Mode: Standard Letter

AT 3136. Applied Laboratory for Therapeutic Modalities.
This course provides students with experiences in laboratory and field applications of therapeutic modalities of all athletic injuries. Must be admitted to the Athletic Training Program or Pre-Physical Therapy Concentration to enroll. Co-requisite: AT 3336.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Co-requisite(s): AT 3336
Grade Mode: Standard Letter

AT 3146. Applied Laboratory for Therapeutic Exercise and Rehabilitation.
This course provides students with experiences in laboratory and field applications of therapeutic exercise and rehabilitation of athletic injuries. Must be admitted to the Athletic Training Program or Pre-Physical Therapy Concentration to enroll. Co-requisite: AT 3346 with a grade of "D" or better.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 3311. Clinical Assessment I.
This course instructs students in the knowledge and skills used in the clinical evaluation of injuries and illnesses involving the head and face, brain, cervical spine, upper extremity, thorax, and pulmonary and cardiovascular systems. Prerequisite: AT 2356 with a grade of "C" or better, and a 2.75 Texas State GPA. Corequisite: AT 3111.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

AT 3312. Clinical Assessment II.
This course instructs students about the preliminary and secondary survey with emphasis on clinical assessment of lumbar spine and lower extremity injuries as well as abdomen, gastrointestinal, genitourinary, endocrine, dermatological, and systemic illnesses. Prerequisite: AT 3311 and AT 3311; both with a grade of "C" or better, and a 2.75 TX State GPA. Corequisite: AT 3312.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Co-requisite(s): AT 3126
Grade Mode: Standard Letter

The course will present a study and critical analysis of the anatomy, injury signs and symptoms, and specific tests used in the clinical evaluation of upper extremity injuries to the physically active individual. Co-requisite: AT 3126. Prerequisite: AT 2356, with a grade of "D" or better, Minimum 2.75 TxState GPA.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Co-requisite(s): AT 3126
Grade Mode: Standard Letter

The course will present a study and critical analysis of the anatomy, injury signs and symptoms, and specific tests used in the clinical evaluation of lower extremity injuries to the physically active individual. Co-requisite: AT 3128. Prerequisites: AT 2356; BIO 2430 or equivalent; Minimum 2.75 TxsState GPA.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Co-requisite(s): AT 3128
Grade Mode: Standard Letter

AT 3333. Therapeutic Interventions for Medical and Psychosocial Conditions.
This course will address the athletic training knowledge and skills required to evaluate and manage common medical conditions and psychosocial concerns found among the physically active. Lecture and laboratory experiences are focused on immediate and advanced care with emphasis on therapeutic interventions and referral. Prerequisites: BIO 1421, or BIO 1330 and BIO 1130; BIO 2430 or equivalent, all with a grade of D or better. (WI).
3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter
AT 3336. Principles and Techniques of Therapeutic Modalities.
A theoretical and evidence-based approach to the use of therapeutic modalities in physical medicine settings. Special emphasis is placed on understanding the physiological effects, indications, contraindications and clinical applications of therapeutic modalities in the treatment and rehabilitation of musculoskeletal and neurological injuries and diseases. Co-requisite: AT 3136. Prerequisite: Minimum 2.75 Texas State GPA.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

AT 3346. Therapeutic Exercise and Rehabilitation.
A theoretical and evidence-based approach to the use of therapeutic exercise in physical medicine settings. Special emphasis is placed on understanding the physiological effects, indications, contraindications and clinical applications of therapeutic exercise in the treatment and rehabilitation of musculoskeletal and neurological injuries and diseases. Corequisite: AT 3146. Prerequisites: AT 3326, AT 3328, PT 3400, Minimum 2.75 Texas State GPA.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Lab Required
Grade Mode: Standard Letter

AT 3358. Clinical Pathopharmacology.
This course combines pathophysiology, the study of dynamic aspects of disease processes and study of drugs prescribed to prevent, diagnose, cure, or care for disease across the lifespan. Content includes etiology, pathogenesis, clinical presentation, implications for treatment, and pharmacological management. Prerequisite: BIO 2430 or equivalent; or PT 3400.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Lab Required
Grade Mode: Standard Letter

AT 3347. Clinical Experience in Athletic Training III.
This course integrates topics in advanced athletic injury evaluation and management into a clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills, and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Restricted to Athletic Training Majors. Prerequisite: AT 2497 with a grade of "C" or better.
4 Credit Hours. 2 Lecture Contact Hours. 20 Lab Contact Hours.
Grade Mode: Standard Letter

AT 3348. Clinical Experience in Athletic Training IV.
This course integrates topics in advanced athletic injury evaluation and management into a clinical education experience designed to assess professional behaviors, cognitive knowledge, psychomotor skills, and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Restricted to students in the Athletic Training Major. Prerequisite: AT 2498 with a grade of "C" or better. (WI).
4 Credit Hours. 2 Lecture Contact Hours. 20 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

AT 4113. Clinical Therapeutic Interventions Lab.
This course provides students with experiences in laboratory and field applications of therapeutic interventions in physical medicine, both modalities and exercise, for patients with musculoskeletal and neurological injuries. Corequisite: AT 4313. Prerequisites: AT 3112 or AT 3110, with a grade of "D" or better, and a 2.75 Texas State GPA.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

AT 4313. Clinical Therapeutic Interventions.
This course provides a theoretical and clinical background in the use of therapeutic interventions in physical medicine, both modalities and exercise, for patients with musculoskeletal and neurological injuries. Prerequisite: AT 3311 and AT 3312; both with a grade of "C" or better, and a 2.75 Texas State GPA. Corequisite: AT 4113.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

AT 4356. Organization and Management of Athletic Training Programs.
This course addresses the organizational and administrative aspects of athletic training program management. Topics will include, but are not limited to, medical, ethical, legal, personnel and financial management, medical record keeping, facilities, supply requisition and inventory, third-party reimbursement, drug testing and other current professional issues. Prerequisites: AT 3326 with a grade of "D" or better. (WI).
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

AT 4360. Internship in Clinical Settings.
Students will be introduced to the clinical aspects of allied health professions by being assigned to a minimum of two clinical sites. Prerequisite: A minimum TXST GPA of 2.75; AT 3311; AT 3312; AT 3312; all with a grade of "C" or better.
3 Credit Hours. 0 Lecture Contact Hours. 20 Lab Contact Hours.
Grade Mode: Standard Letter

AT 4497. Clinical Experience in Athletic Training V.
This course integrates topics in therapeutic interventions and exercise into a clinical education experience that assesses professional behaviors, cognitive knowledge, psychomotor skills, and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 3497 with a grade of "C" or better.
4 Credit Hours. 2 Lecture Contact Hours. 20 Lab Contact Hours.
Grade Mode: Standard Letter

AT 4498. Clinical Experience in Athletic Training VI.
This course integrates topics in nutrition, professionalism, and administration into a clinical education experience that assesses professional behaviors, cognitive knowledge, psychomotor skills, and proficiency-based case simulations. The course incorporates didactic and clinical education at an assigned clinical site under the supervision of a clinical instructor. Prerequisite: AT 3498 with a grade of "C" or better.
4 Credit Hours. 2 Lecture Contact Hours. 20 Lab Contact Hours.
Grade Mode: Standard Letter
Courses in Exercise and Sports Science (ESS)

**ESS 1100. Lifetime Fitness and Wellness.**
This course introduces students to the concepts of health-related physical fitness. Emphasis is placed on learning how to teach these concepts. Students will design and implement an exercise program for enhancing health-related physical fitness. Restricted to majors or minors in Exercise and Sports Science, Athletic Training, or Health and Fitness Management.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1101. Seminar in Exercise and Sport Science.**
This course provides students with an introduction to the various areas of exercise science, including interventions for healthy versus clinical populations, professional opportunities, individual awareness of professional responsibilities, familiarization with current trends and issues, and professional literature.

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1128. Aquatic Therapy.**
The course addresses basic principles and concepts of aquatic therapy and aquatic emergency management. This course prepares students for the American Red Cross Basic Water Rescue Certification.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1172. Beginning Field Sports.**
This course prepares students to become proficient instructors of field sports, including softball and soccer. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, game play, referee skills, skills assessment, and conditioning for field sports. Restricted to majors or minors in Exercise and Sports Science, Coaching, or Health and Fitness Management.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1175. Beginning Jogging and Conditioning.**
This course presents the proper biomechanics of jogging, safety rules, and conditioning principles relevant to the activity. Course topics include warming-up and cooling-down, hydration, monitoring and modifying intensity, training for road races, and jogging-related injuries. Students will also learn how to train individuals entering into a jogging program. Restricted to majors or minors in Exercise and Sports Science and Health and Fitness Management.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1176. Beginning Tennis, Badminton, and Other Racket Sports.**
This course prepares Exercise and Sports Science majors to be proficient instructors of racket sports, including tennis and badminton. The emphasis is on the fundamentals of racket sports and program development for the beginner. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1177. Beginning Volleyball and Basketball.**
This course prepares students to become proficient instructors of volleyball and basketball. Emphasis is on skill development, instructional practices, peer coaching, rules, terminology, offensive and defensive strategies, team organization, communication, game play, referee skills, skills assessment, and conditioning for volleyball and basketball. Restricted to majors or minors in Exercise and Sports Science, Health and Fitness Management, or Coaching.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1178. Beginning Weight Training.**
This course prepares students to be proficient instructors of all forms of resistance training. Emphasis is on understanding the proper, safe, and effective techniques of weight lifting. Students will learn how to develop resistance-training programs for untrained individuals with a variety of conditions. Restricted to majors or minors in Exercise and Sports Science, Athletic Training, or Health and Fitness Management.

1 Credit Hour. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1201. Group Exercise Instructor Training.**
This course is for students interested in becoming certified group exercise instructors. Students will learn how to safely and effectively conduct group exercise classes. Students will be trained to teach a variety of formats, such as high- and low-impact aerobics, step aerobics, kickboxing, yoga, and resistance training. Prerequisite: Major in Health and Fitness Management or consent of the instructor.

2 Credit Hours. 1 Lecture Contact Hour. 1 Lab Contact Hour.
Grade Mode: Standard Letter

**ESS 1298. Foundations of Sports Medicine.**
This introductory course provides an essential foundation for students beginning their course of study in the field of sports medicine. Students will understand key principles of professionalism, responsibilities, ethics and legal aspects, scope of practice, and health care job opportunities in the careers of sports medicine.

2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 1310. Introduction to Teaching Physical Education.**
This course is designed to provide pre-service physical educators an introduction to fundamental principles of teaching physical education in K-12 settings. Progressive steps in developing a basic understanding of pedagogical skills, physical education curriculum, and professional attributes needed to pursue the teaching profession.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

**ESS 2320. Motor Development.**
This course provides the exercise science and physical education student with a knowledge base in the study of changes in motor behavior across the lifespan, the processes that underlie these changes, and factors that affect them. Prerequisite: Major or minor in Exercise and Sports Science.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter
ESS 3117. Laboratory in Exercise Physiology.
In this laboratory course, students perform experiments that highlight
the physiological responses to exercise. This course also introduces
students to basic techniques in the assessment of health and human
performance, including the assessment of maximal oxygen consumption,
body composition, anaerobic power and capacity, muscular fitness,
movement economy, and dietary intake. Prerequisites: BIO 2430, or
BIO 2451 and BIO 2452, all with a grade of "C" or better. Co-requisite:
ESS 3317 with a grade of "D" or better. An overall GPA of 2.5 or higher is
required.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3303. Assistant Dive Instructor.
This course provides students with the technical knowledge necessary
to prepare for the Assistant Diver Instructor Scuba Certification. Topics
include advanced diving physiology, air station operations, assisting
instructors with beginning open-water dive students, and boat diving
operations. Prerequisite: PFW 1201 with a grade of "D" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3304. Divemaster.
This course provides students with the technical knowledge necessary
to prepare for the National Association of Underwater Instructors
Divemaster Scuba Certification. Topics include advanced diving
physiology, organizing open-water dives, air station operations, assisting
instructors with beginning and advanced open-water dive students, and
boat diving operations. Prerequisite: Assistant Instructor Certification.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3317. Exercise Physiology.
Students learn the acute and chronic physiological responses to exercise.
Emphasis is on muscle bioenergetics, muscle contractile properties,
performance improvement through training and supplementation, as well as
cardiopulmonary and endocrine responses to exercise. Prerequisites:
BIO 2430, or BIO 2451 and BIO 2452, with grades of "C" or better. An
overall GPA of 2.5 or higher is required. Co-requisite: ESS 3117 with a
grade of "D" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Lab Required
Grade Mode: Standard Letter

ESS 3319. Introduction to Cardiopulmonary Exercise Physiology.
This course introduces students to the cardiovascular and pulmonary
systems, discusses the physiological dynamics, control mechanisms, and
system interrelationships of the cardiovascular and pulmonary systems,
and explores the effects of exercise on these systems, including the
physiological factors that limit exercise tolerance across the spectrum
of health and chronic disease. Prerequisite: BIO 2430, or BIO 2451 and
BIO 2452; with grades of "C" or higher, ESS 1101, and Overall GPA of 2.5 or
higher is required.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3320. Biomechanics.
This course provides an introduction to the mechanical foundations of
anatomical function and human movement. Qualitative and quantitative
biomechanical analyses of human movement are introduced to inform
the prescription of technique, equipment, and training interventions.
Prerequisites: BIO 2430, or BIO 2451 and BIO 2452, all with a grade of "C"
or better. An overall GPA of 2.5 or higher is required.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3321. Teaching Elementary Children Physical Activity.
This course introduces students majoring in Elementary Education and/
or Exercise and Sports Science to physical education knowledge and
movement concepts. It provides innovative techniques for incorporating
physical activity within the elementary school setting. The course
presents theory and then guides the students in applying those theories
in a practical way.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3323. Psychosocial Aspects of Exercise and Sport Science.
This course examines the psychological and social theories and and
research related to physical activity. Emphasis is on the determinants
that influence exercise behavior and sport participation.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3325. Applied Assessment of Physical Activity.
This course is designed to provide students with a theory to practice
approach in the assessment of physical activity within the physical
education setting. Particular emphasis is placed on empowering students
to use relevant and meaningful physical activity assessments in K-12
schools. Prerequisites: ESS 1310 and ESS 2320. Restricted to majors
seeking all level Teacher Certification in Physical Education.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 3329. Motor Learning.
This course provides students with an understanding of the physiological,
neurological, and psychological factors affecting performance and
acquisition of motor skills. Students will examine the structural
components underlying the learning of motor skills an draw upon
elements from sport, physical activities, and rehabilitation. Prerequisite:
Overall GPA of 2.5 or higher.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

This course examines the theories and principles of effective
coaching, including philosophy, ethics, strategies, team motivation and
organization, coach-athlete relationships, performance analysis, and the
administration of facilities, personnel, and contests.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter
ESS 4317. Fitness Assessment and Programming for Healthy Populations.
Students are presented with current information on fitness assessment and exercise programming for healthy individuals of all ages and fitness levels. Emphasis is placed on preparation for multiple certifications offered by relevant professional organizations. Prerequisites: ESS 3117 and ESS 3317; all with grades of "C" or better; an Overall GPA of 2.5 or higher is required.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 4318. Fitness Assessment and Programming Practicum for Healthy Populations.
During this 80-hour practicum, students will acquire advanced knowledge and skills associated with appraising health risk, assessing fitness levels, and designing exercise programs for diverse populations through online, classroom, and laboratory settings as well as through field-based experiences by working in a variety of venues. Prerequisite: ESS 3117 and ESS 3317, all with grades of "C" or better and Overall GPA of 2.5 or higher is required.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 4319. Fitness Assessment and Programming in Clinical Exercise Science.
This course provides students with an opportunity to develop knowledge, skills, and competence required to assess and prescribe exercise for clinical populations and to gain knowledge related to managed care and rehabilitation with clinical patients. Prerequisites: ESS 3117 and ESS 3317 both with grades of "C" or better and Overall GPA of 2.5 or higher is required.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

This course discusses the development and evaluation of training principles and programs for diverse populations. Emphasis is placed on physiological adaptations and mechanical principles related to the application of resistance training. Prerequisites: BIO 2430, or BIO 2451 and BIO 2452; ESS 3317 and ESS 3317, all with a grade of "C" or better. An overall GPA of 2.5 or higher is required.
3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.
Grade Mode: Standard Letter

ESS 4321. Fitness Assessment and Programming Practicum in Clinical Exercise Science.
This course presents current exercise and sports science information on testing and programming for clinical populations. This course provides fundamental knowledge, competence, and skills necessary to conduct safe and valid assessments, interventions, and rehabilitation programs for patients with health problems. Students will spend 80 hours at a practicum site. Prerequisite: ESS 1101, ESS 3117, ESS 3317, and ESS 3319, all with grades of "C" or higher and Overall GPA of 2.5 or higher is required.
3 Credit Hours. 1 Lecture Contact Hour. 5 Lab Contact Hours.
Grade Mode: Standard Letter

ESS 4322. Adapted Physical Education.
This introductory course provides All-Level teacher certification candidates in Exercise and Sports Science with content knowledge on legal mandates, evidence-based practices, and the characteristics of selected disabilities and their considerations when designing meaningful individualized physical activity experiences to meet the students with disabilities in school settings. Prerequisites: ESS 1310, ESS 2320 and 2.75 overall GPA. (WI).
3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

ESS 4323. Adapted Physical Activity.
This course introduces students to the field of adapted physical activity, including sport and leisure for persons with disabilities. This course provides content knowledge on how to instruct physical activities to individuals with unique needs in various settings. (WI).
3 Credit Hours. 2 Lecture Contact Hours. 1 Lab Contact Hour.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

ESS 4333. Fitness Assessment and Programming for Populations Requiring Special Considerations.
This course provides practical information on fitness assessment and programming for persons requiring special considerations due to their age, pregnancy, obesity, diabetes, low back pain or other health conditions. Prerequisite: ESS 1101, ESS 3117 and ESS 3317, all with grades of "C" or higher and Overall GPA of 2.5 or higher is required.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

This course is for students who are interested in research related to Exercise and Sports Science. Students develop a research study, collect data, and analyze the results. Repeatable for credit with different emphasis. Prerequisites: A minimum GPA of 3.00 and special approval.
3 Credit Hours. 1 Lecture Contact Hour. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Credit/No Credit

ESS 4340. Internship in Coaching.
This 220-hour internship provides students with work-related experience. Students will strengthen their coaching-related knowledge, skills, and abilities by observing and shadowing coaches as well as assisting with a range of tasks, including training athletes, managing the facilities, and organizing practices. Prerequisites: completion of all coursework required for the minor in Coaching and special approval.
3 Credit Hours. 0 Lecture Contact Hours. 15 Lab Contact Hours.
Grade Mode: Credit/No Credit

This course introduces students to the fundamental principles and techniques of measuring human performance related to Exercise and Sports Science, as well as evaluating and interpreting the results of exercise science and human performance tests in children and adults. Prerequisite: Overall GPA 2.5 or higher.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter
ESS 4624. Principles and Practices for Teaching Physical Education.  
This course provides students with an in-depth study of theory and curriculum encompassing the design and implementation of developmentally appropriate and culturally responsive physical education programs for children and adolescents. Emphasis is on implementing evidenced-based curricula that promote youths’ enjoyment of and participation in lifelong physical activity. Prerequisites: ESS 1310 and ESS 2320 and ESS 3325, all with a grade of "D" or better, and 2.75 overall GPA.  
6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter  

In this 400-hour internship, students will apply theoretical health and fitness management principles and concepts to an organizational setting. This course requires students to participate in a health and fitness organization/agency and complete a semester-long planning and evaluation project. Prerequisites: Completion of all other coursework required for the degree, department approval, and an overall GPA of 2.5 or higher. (WI).  
6 Credit Hours. 0 Lecture Contact Hours. 25 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter  

ESS 4661. Internship in Clinical Exercise Science.  
This course places the student in a professional work environment to apply the concepts of exercise rehabilitation in a cardiac care, respiratory therapy, or other healthcare setting, under the supervision of professionals in the field. Students are required to spend 400 hours in this internship position. Prerequisite: ESS 4319 and ESS 4321, all with a grade of "C" or better; department approval; and an overall GPA of 2.5 or higher.  
6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter  

Courses in Physical Fitness/Wellness (PFW)  

PFW 1101. Lifetime Fitness & Wellness.  
To develop knowledge, skills, and physical activity behaviors associated with personal fitness and wellness.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110A. Aerobic Conditioning.  
This course covers a variety of aerobic conditioning formats.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110B. Group Fitness.  
This course will include various types of aerobic/cardio exercise formats.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110C. Gymnastics.  
Gymnastics.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110D. Balance & Tumbling.  
Balance & Tumbling.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110E. Beginning Jogging & Conditioning.  
Beginning Jogging/Conditioning.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110F. Fitness Conditioning.  
This course covers basic fitness conditioning principles and activities.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110G. Restricted Fitness Activities.  
Restricted Fitness Activities.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1110H. Principles and Practice of Cross-Training.  
This course is designed for students prepared to undertake advanced physical training to achieve advanced fitness goals. Students perform cross-training, survey the exercise science foundations of cross-training, test and design a personalized evidence-based programs.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter  
TCCN: PHED 1164  

PFW 1111A. Military Physical Fitness Training.  
This course is designed to expose students to a military-style physical fitness program of running, calisthenics and cross training. It is designed to test and improve students’ physical fitness levels and prepare them to take and pass the official Air Force Physical Fitness Assessment.  
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter
PFW 1114C. Ranger Challenge Military Fitness Training.
This course is designed to expose students to vigorous and challenging military style conditioning for special events of elite military units like the Army Rangers. The course will prepare students to compete for the opportunity to represent Texas State Army ROTC program during the annual national Ranger Challenge competition.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter

PFW 1114D. YMCA Lifeguard Training.
This course provides the knowledge and skill necessary to be lifeguard. Successful students will be certified in ASHI for lifesaving, CPR Pro, and basic first aid. Students must pass a physical skills test prior to the class and must be at least 16 years of age.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Credit/No Credit

PFW 1125A. Wrestling.
Wrestling.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter

PFW 1130A. Beginning Basketball.
Beginning Basketball.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1130B. Soccer.
Soccer.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1135B. Aquatic-Conditioning.
Aquatic-Conditioning.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140A. Football Varsity.
Football Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140B. Basketball—Men’s Varsity.
Basketball—Men’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140C. Basketball—Women’s Varsity.
Basketball—Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140D. Track & Field—Men’s Varsity.
Track & Field—Men’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140E. Track & Field—Women’s Varsity.
Track & Field—Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140F. Volleyball — Women’s Varsity.
Volleyball — Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140G. Baseball–Men’s Varsity.
Baseball–Men’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140H. Softball–Women’s Varsity.
Softball–Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1140I. Soccer–Women’s Varsity.
Soccer–Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1149. Strutters.
Strutters.
1 Credit Hour. 1 Lecture Contact Hour. 9 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164
PFW 1150B. Beginning Bowling.
Beginning Bowling.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1150C. Intermediate Bowling.
Intermediate Bowling.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1150D. Beginning Golf.
Beginning Golf.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1150F. Self Defense.
Self Defense.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1150G. Restricted Leisure Activities.
Restricted Leisure Activities.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1154. Leisure/Recreation Activities.
Leisure/Recreation Activities.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1154B. Challenge Course Facilitation.
This course provides an overview of leadership theories and skill development for indoor/outdoor challenge course activities, with an emphasis on safety management. Students will develop skills necessary to facilitate either high or low elements of a challenge course. May be repeated once with different emphasis for credit.
1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1154C. Backpacking.
Backpacking.
1 Credit Hour. 0 Lecture Contact Hours. 1 Lab Contact Hour.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155A. Indoor Racket Sports.
This course provides an introduction to badminton, racquetball, and pickleball.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155B. Beginning Fencing.
Beginning Fencing.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155D. Advanced Fencing.
Advanced Fencing.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155G. Racquetball.
Racquetball.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155H. Beginning Tennis.
Beginning Tennis.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155I. Intermediate Tennis.
Intermediate Tennis.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155J. Judo.
Judo.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155K. Beginning Karate.
Beginning Karate.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164
PFW 1155M. Advanced Karate.
Advanced Karate.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1155N. Pocket Billiards.
Pocket Billiards.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1160A. Beginning Volleyball.
Beginning Volleyball.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1160B. Intermediate Volleyball.
Intermediate Volleyball.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1160C. Intermediate Swimming.
Intermediate Swimming.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1165A. Golf – Men’s Varsity.
Golf – Men’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1165B.ѓ Women’s Varsity.
Golf – Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1165C. Tennis – Women’s Varsity.
Tennis – Women’s Varsity.
1 Credit Hour. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1165D. Varsity Cheerleaders.
Varsity Cheerleaders.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1165E. Advanced Recreational Dance.
Advanced Recreational Dance.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1190A. Canoeing.
Canoeing.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1190B. Beginning Swimming.
Beginning Swimming.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1190C. Intermediate Scuba.
Beginning Scuba.
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1201. Advanced Scuba Diving.
Advanced Scuba Diving.
2 Credit Hours. 1 Lecture Contact Hour. 3 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter
TCCN: PHED 1164

PFW 1301. Social and Behavioral Dimensions of Physical Fitness and Wellness.
Students will explore the role of physical activity in a healthy and productive society. The course focuses on social and cultural influences on motivation, values and beliefs related to physical activity, as well as the impact of physical activity on individual, community, and population.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Soc & Behav Sciences Core 080
Grade Mode: Standard Letter

All PFW courses meet two clock hours per week for one semester hour credit unless otherwise designated.
Courses in Public Health (PH)

PH 1310. Foundations of Personal Health.
This course provides an introduction to personal health and wellness topics including nutrition, mental health, sexual health, and physical fitness with an emphasis on health trends and health behaviors.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 1320. Introduction to Public Health.
This course provides students a basic understanding of U.S. and global public health systems. Students are also introduced to various public health settings, specific careers in public health, and public health certifications.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 2338. Substance Use and Abuse.
This course explores the impact of substance use and abuse on personal, public, and population health. Course content includes current statistics and information on substance use and abuse issues and substance prevention interventions with a focus on public health prevention strategies.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 2340. Community Health.
This course acquaints students with issues, trends, developments, and principles in community health. The course also provides an overview of selected topics, such as epidemiology, community organization, and program planning. Corequisite: PH 1320 with a grade of "C" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3301. Environmental Health.
This course is an examination of the ecological impact resulting from contemporary sociopolitical action and its resulting influence on human health. Prerequisites: PH 1320 and PH 2340 with grades of "C" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

This course emphasizes analysis and interpretation of health-related data. Descriptive and inferential statistics (including measures of central tendency and variability, estimation, ANOVA, and regression) will be used to understand factors associated with current health-related issues. (WI) Prerequisites: PH 1320; PH 2340; and MATH 1315, MATH 2417, MATH 2471, all with grades of "C" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

PH 3321. Health in the School Setting.
This course offers a foundation in health methods and activities to provide resources for the elementary and secondary school teacher. Provides an overview of current school health issues: Whole School, Whole Community, Whole Child model, mental health, personal health, family life, substance abuse, and violence in the school setting.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3330. Inclusion and Diversity in Women's Health.
This course is designed to explore the health care concerns unique to women and to provide students with opportunities to create strategies to improve women's health. Particular attention will be given to issues that affect women in under-served populations and how to more effectively serve their needs.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3348. Prevention of Disease.
This course provides an overview of the etiology of communicable and chronic diseases with special emphasis on health promotion activities to reduce the incidence of disease in communities and society.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3350. Consumer Health.
This course focuses on consumer health and decision making with regard to the selection of health products and services. Students will learn how to effectively evaluate health information with emphasis on consumer literacy, public policy, and consumer products and services.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3360. Issues in Human Sexuality.
The course provides a study of human sexuality as a lifelong process of acquiring information and forming healthy attitudes, beliefs, and values regarding sexuality. Human sexuality's impact on personal and public health will be explored.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3370. Epidemiology.
This course introduces students to epidemiological concepts including determinants of health and patterns of disease in populations, population health descriptive techniques, use of health indicators and secondary data sources. Students will focus on epidemiology in community health assessment and program evaluation, and development of public health strategies and policy. Prerequisites: PH 1320; PH 2340; both with grades of "C" or better.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

This course focuses on principles of international health in global populations. Students explore roles of health educators collaborating with providers of health services to diverse populations.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

PH 3376. Worksite Health Promotion.
The purpose of this course is to introduce students to worksite health promotion. The focus of the course is on planning, implementing, and evaluating worksite health promotion programs. The course addresses other contemporary health issues, policies, and considerations that affect worksite health promotion.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter
PH 4100. Professional Development in Public Health.  
This course provides the opportunity for students to obtain a community or public health promotion internship and to actively participate in professional development activities including conferences, development of resumes and interaction with health professionals. Prerequisite: 2.5 major GPA or higher. Corequisite: PH 4640 with a grade of "C" or better. 
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.  
Grade Mode: Standard Letter

PH 4336. Health Behavior Theory.  
This course introduces students to health behavior theory, including cognitive, operant, and social theories of motivation and behavior, behavior change theory, social marketing, and social ecology. Students will also learn about the role of behavior theory in health promotion practice and public health interventions. (WI) Prerequisites: PH 1320 and PH 2340 with grades of "C" or better.  
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter

This course is designed for undergraduate students who display potential for independent research in public health. Students work individually with faculty to develop an independent research study/project in public health. Open on an individual basis by arrangement with the division chair. May be repeated for credit with different emphasis. Prerequisites: Instructor approval required.  
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter

PH 4640. Public Health Program Planning and Evaluation.  
Students apply professional knowledge and skills to the development of public health programs. Topics include needs assessment, data gathering techniques, instrument design, data and statistics, and the interpretation, reporting, and application of findings for program development. Cultural competency and communication are covered. (WI) Prerequisites: PH 1320, PH 2340, and PH 4336; all with grades of "C" or better; major GPA of 2.5 or higher. Corequisites: PH 4336.  
6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter

PH 4660. Internship in Public Health.  
This internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 480 contact hours is required. (WI) Prerequisites: PH 4100 and PH 4640 with grades of "C" or better; major GPA of 2.5; instructor approval required. 
6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter

Courses in Recreational Administration (REC)

REC 1310. Introduction to Recreation and Leisure Services.  
Introduction to recreation, includes brief historical backgrounds, professional opportunities, present status, past and present leaders. Role of leisure time in our social structure, professional responsibility, familiarization with current issues and trends, and professional literature. Lecture and field trips. A grade of "C" or better in this course is required to enroll in any upper division Recreational Administration courses. 
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter

REC 1330. Leisure and Outdoor Recreation.  
This course provides students with an overview of the role the natural world plays in recreation and leisure services. The course will focus on values of outdoor recreation, adventure recreation, environmental impact, and the role of government in the provision and protection of outdoor recreation programs and resources.  
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter

REC 1370. Introduction to Therapeutic Recreation.  
This course surveys history, philosophy, terminology and professional opportunities in therapeutic recreation. The role of leisure and therapeutic recreation in enhancing quality of life is explored. 
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter

REC 2330. Leadership in Recreation and Leisure Services.  
Discussion of leadership theories and skill development for indoor-outdoor games and sports. Teaching activities to develop skill in programming various indoor/outdoor recreational settings. 
3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours.  
Grade Mode: Standard Letter

REC 2335. Recreation Program Development.  
This course introduces students to basic principles and procedures for developing recreation programs that respond to human needs. This course provides students with opportunities to acquire and utilize recreation programming skills through practical application. Prerequisites: REC 1310 with a grade of "C" or better, and REC 2330. 
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter  
TCCN: PHED 1336

REC 2336. Directed Field Experience in Programming Recreation.  
Students participate in programming and leadership with a selected recreation agency. Online learning modules and communications guide the work and professional reflections. Prerequisite: REC 2335 with a grade of "C" or better, Texas State GPA of 2.0 or better. 
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Grade Mode: Standard Letter

PH 4100. Professional Development in Public Health.  
This course provides the opportunity for students to obtain a community or public health promotion internship and to actively participate in professional development activities including conferences, development of resumes and interaction with health professionals. Prerequisite: 2.5 major GPA or higher. Corequisite: PH 4640 with a grade of "C" or better. 
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.  
Grade Mode: Standard Letter

PH 4336. Health Behavior Theory.  
This course introduces students to health behavior theory, including cognitive, operant, and social theories of motivation and behavior, behavior change theory, social marketing, and social ecology. Students will also learn about the role of behavior theory in health promotion practice and public health interventions. (WI) Prerequisites: PH 1320 and PH 2340 with grades of "C" or better.  
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter

This course is designed for undergraduate students who display potential for independent research in public health. Students work individually with faculty to develop an independent research study/project in public health. Open on an individual basis by arrangement with the division chair. May be repeated for credit with different emphasis. Prerequisites: Instructor approval required.  
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.  
Course Attribute(s): Exclude from 3-peat Processing  
Grade Mode: Standard Letter

PH 4640. Public Health Program Planning and Evaluation.  
Students apply professional knowledge and skills to the development of public health programs. Topics include needs assessment, data gathering techniques, instrument design, data and statistics, and the interpretation, reporting, and application of findings for program development. Cultural competency and communication are covered. (WI) Prerequisites: PH 1320, PH 2340, and PH 4336; all with grades of "C" or better; major GPA of 2.5 or higher. Corequisites: PH 4336.  
6 Credit Hours. 6 Lecture Contact Hours. 0 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter

PH 4660. Internship in Public Health.  
This internship involves the application of public health concepts to a community or public health setting. Students participate in the work of a health organization/agency and complete a semester-long project. A minimum of 480 contact hours is required. (WI) Prerequisites: PH 4100 and PH 4640 with grades of "C" or better; major GPA of 2.5; instructor approval required. 
6 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.  
Course Attribute(s): Writing Intensive  
Grade Mode: Standard Letter
REC 2370. Practices and Interventions in Therapeutic Recreation. Students engage in classroom content and service learning to develop knowledge and skills in facilitation techniques used in a variety of therapeutic recreation settings. Prerequisites: REC 1310 and REC 1370 with grades of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours. Grade Mode: Standard Letter

REC 3325. Recreation Administration. This course covers administrative practices relevant to entry-level professionals in the recreation industry. Topics include foundations of management, decision-making, planning, coordination of resources, and ethics in the public recreation sector. Prerequisite: REC 2335 with a grade of "C" or better; MATH 1312, MATH 1315, MATH 1317, MATH 1319, MATH 1329, MATH 2321, MATH 2417, MATH 2471, HON 2302A, or HON 2302B.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

REC 3335. Advanced Recreation Program Development. Students will develop advanced program planning skills through the integration of theories and models of program development, consideration of diverse target markets, performing needs assessments, and planning for risk management issues. Students will apply these planning skills through an applied project. Prerequisite: REC 2335 with a grade of "C" or better. (WI).
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Course Attribute(s): Writing Intensive Grade Mode: Standard Letter

REC 3340. Design and Maintenance of Recreational Facilities. Introduce theories and provide practical experience in the design, development, operation, maintenance, administration of various recreational facilities. Prerequisite: REC 2335 with a grade of "D" or better.
3 Credit Hours. 2 Lecture Contact Hours. 2 Lab Contact Hours. Grade Mode: Standard Letter

REC 3351. Evaluation of Leisure Service Programming. Methods, techniques and application of the evaluation process related to a wide variety of leisure service functions: clientele and prospective participants, programs, personnel, facilities, organizations and literature. Prerequisite: REC 2335 with a grade of "D" or better. (WI).
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Course Attribute(s): Writing Intensive Grade Mode: Standard Letter

REC 3370. Assessment and Documentation in Therapeutic Recreation. This course introduces students to selecting, utilizing, and interpreting assessment instruments, and to the processes used to document assessment results and client progress used in therapeutic recreation practice. Prerequisites: REC 1370 with a grade of "C" or better, and HIM 2360 with a grade of "D" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

REC 4320. Therapeutic Recreation and People with Psychiatric Conditions. Students will gain a theoretical and practical foundation for applying the therapeutic recreation process with persons with psychiatric conditions. Focus will be on the development of skills necessary to implement evidence-based interventions aimed at behavior change. A grade of "C" or better in this course is required for enrollment into REC 4680. Prerequisites: REC 1370 and REC 2370 and REC 3370 and PSY 3300 and PSY 3315, all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

REC 4330. Entrepreneurial Recreation Management. This course provides a study of the scope and the entrepreneurial management of leisure services. The focus will be on financial management related to profit centers including planning, legal liability, record keeping, and revenue management. Prerequisite: REC 2335 with a grade of "D" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

REC 4335. Outdoor Recreation Programming. Students apply principles and procedures for developing and leading recreation programs in a variety of specialized, outdoor environments. Students will demonstrate competencies for Leave No Trace certification. Course is taught in cooperation with the Texas State University–Outdoor Center. Prerequisites: REC 1330 and REC 2335, all with a grade of "D" or better; or Consent of Instructor.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

REC 4337. Independent Study in Recreation Administration. This course consists of individual study related to recreation administration under direct supervision of a faculty member. (WI).
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Course Attribute(s): Exclude from 3-peat Processing|Writing Intensive Grade Mode: Standard Letter

REC 4350. Theories and Methods of Supervision in Recreation and Leisure Services. This course presents theories and methods relating to recruitment, selecting, hiring, training, disciplining, and discharging employees. This course also addresses legal issues related to personnel supervision. Prerequisite: REC 2335 with a grade of "D" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

REC 4370. Principles of Therapeutic Recreation. This course will cover the principles of therapeutic recreation services including comprehensive program planning, administrative processes, and issues related to professionalism. Prerequisites: REC 1370 and REC 2370 and REC 3370, all with a grade of "C" or better.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter
**REC 4380. Seminar in Recreation.**
This capstone seminar addresses trends in leisure services. Emphasis is on the interactional effects of diverse services, consumers, and environments. Taken in the fall or spring semester immediately preceding enrollment in REC 4680 or REC 4681. (WI) Prerequisite: Departmental approval.

*3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.*

**Course Attribute(s): Exclude from 3-peat Processing|Writing Intensive**

**Grade Mode:** Standard Letter

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**REC 4680. Internship in Recreation Administration.**
This internship involves full time work (minimum 400 hours) during which a student will complete administrative tasks in an approved parks and recreation agency. The work is co-supervised by faculty and an agency representative trained in the recreation field. A grade of "C" or better is required for graduation. Prerequisites: Completion of all other required REC coursework, REC 1310 and REC 2335 and REC 2336 and REC 3325 and REC 4380, all with a grade of "C" or better; Major GPA of 2.25 or higher.

*6 Credit Hours. 0 Lecture Contact Hours. 30 Lab Contact Hours.*

**Grade Mode:** Standard Letter

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**REC 4681. Internship in Therapeutic Recreation.**
This internship involves experiential learning over a long semester during which a student will work fulltime (a minimum of 560 hours) in a therapeutic recreation setting under direct professional supervision by a CTRS and faculty member with CTRS credentials. Prerequisite: Instructor approval; REC 1310, REC 1370, REC 2335, REC 2336, REC 2370, REC 3325, REC 3370, REC 4320, REC 4370, and REC 4380; all with grades of "C" or better; Major GPA of 2.25.

*6 Credit Hours. 0 Lecture Contact Hours. 35 Lab Contact Hours.*

**Grade Mode:** Standard Letter