# Department of Health and Human Physiology

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## Mission Statement:

The Department of Health & Human Physiology is committed to advancing human well-being through interdisciplinary education, research, and service. We prepare students for impactful careers in health, nutrition, exercise, rehabilitation, and sport sciences. Through rigorous academic programs at both the undergraduate and graduate levels, our department fosters evidence-based practice, critical thinking, and ethical leadership. We strive to improve individual and community health by empowering graduates to promote lifelong wellness, performance, and recovery across diverse populations.

## Bachelor of Science in Exercise and Sport Physiology

The Exercise & Sport Physiology program provides advanced education and training in exercise physiology, applied sport physiology, and clinical physiology according to the standards and guidelines established by the American College of Sports Medicine (ACSM), the Commission on Accreditation of Allied Health Education Programs (CAAHEP), and the Committee on Accreditation for the Exercise Sciences (CoAES). Students learn from field experts, practitioners, and research scientists in managing programs to assess, design, and implement physical activity, exercise, and behavioral interventions to enhance health, functional capacity, and quality of life.

| | | |
|---|---|---|
| General Education Requirements (https://catalog.tarleton.edu/academicaffairs/) | | 42 |
| BIOL 2401 [shared] | Anatomy and Physiology I | |
| BIOL 2402 [shared] | Anatomy & Physiology II | |
| MATH 1314 [shared] | College Algebra | |
| PSYC 2301 [shared] | General Psychology | |
| CHEM 1111 [shared] | College Chemistry I (Laboratory) | |
| HLSC 1110 | Exploring Careers and Pathways in Health Science | 1 |
| EXPH 1301 | Introduction to Applied Exercise and Sport Physiology | 3 |
| KINE 2356 | Prevention and Care of Athletic Injuries | 3 |
| KINE 3390 | Kinesiology | 3 |
| KINE 3330 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Motor Behavior | 3 |
| KINE 3370 | Physiology of Exercise | 3 |
| EXPH 3170 | Exercise Physiology Lab | 1 |
| EXPH 3360 | Essentials of Strength Training & Conditioning | 3 |
| KINE 3319 | Medical Terminology | 3 |
| CHEM 1311 | College Chemistry I (Lecture) | 3 |
| KINE 4330 | Exercise Testing and Prescription | 3 |
| KINE 3360 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Sports Nutrition | 3 |
| KINE 4390 | Biomechanics | 3 |
| MATH 1342 | Elementary Statistical Methods | 3 |
| or MATH 3450 | Principles of Bio-Statistics | |
| HLSC 3435 | Principles of Research for Health Sciences | 4 |
| EXPH 4184 | Internship in Applied Exercise and Sport Physiology | 1 |
| **Total Hours** | | **85** |

### Human Performance

| | | |
|---|---|---|
| PSYC 3360 | Sport Psychology | 3 |
| or KINE 4302 | Psychological Aspects of Sports | |
| EXPH 4360 | Sport & Performance Analytics | 3 |
| KINE 3333 | Tactical Strength and Conditioning | 3 |
| EXPH 3345 | Bioenergetics & Supplementation | 3 |
| KINE 2360 | Principles of Athletic Coaching | 3 |
| EXPH 4380 | Programming & Periodization | 3 |
| KINE 4335 | Applications in Clinical Exercise Physiology | 3 |
| Choose 14 Credit Hours from the Following: | | 14 |
| KINE 3304 | Orthopedic Assessment | |
| KINE 3314 | Therapeutic Exercise and Rehabilitation | |
| MATH 1316 | Plane Trigonometry | |
| KINE 3325 | Theory of Sport Management | |
| KINE 3345 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Sport Leadership | |
| KINE 3375 | Legal Issues in Sport and Recreation | |
| KINE 4350 | Recreational and Sport Facility Management | |
| KINE 4370 | Organization and Administration of Sport and Recreation | |
| KINE 4395 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Sport Promotion and Public Relations | |
| MATH 2412 | Precalculus Math | |

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|---|---|---|
| PHYS 1401 | College Physics I | |
| NRSC 2@, 3@, 4@ | | |
| BIOL 1@, 2@, 3@, 4@ | | |
| NUTR 2@, 3@, 4@ | | |
| CHEM 1@, 2@ | | |
| **Total Hours** | | **35** |

### Movement and Rehabilitation Science

| | | |
|---|---|---|
| KINE 3304 | Orthopedic Assessment | 3 |
| KINE 3314 | Therapeutic Exercise and Rehabilitation | 3 |
| MATH 1316 | Plane Trigonometry | 3 |
| EXPH 4395 | Applied Biomechanics | 3 |
| PHYS 1401 | College Physics I | 4 |
| EXPH 3331 | Motor Control | 3 |
| Choose 16 Credit Hours from the Following: | | 16 |
| CHEM 1312 | College Chemistry II (Lecture) | |
| CHEM 1112 | College Chemistry II (Laboratory) | |
| BIOL 1406 | Biology for Science Majors | |
| BIOL 1407 | Biology for Science Majors II | |
| PHYS 1402 | College Physics II | |
| SOCI 1301 | Introductory Sociology | |
| PSYC 2320 | Abnormal Psychology | |
| ENGL 3309 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Professional Writing | |
| PSYC 3307 | The Human Lifespan | |
| or PSYC 2314 | Life Span Growth & Development | |
| KINE 3333 | Tactical Strength and Conditioning | |
| BIOL 2@, 3@, 4@ | | |
| NRSC 2@, 3@, 4@ | | |
| NUTR 2@, 3@, 4@ | | |
| **Total Hours** | | **35** |

## Bachelor of Science in Health Science Program

This Bachelor of Science in Health Science degree is designed to prepare graduates to advance health utilizing the guiding principles of the Quintuple Aim for Healthcare Improvement. Individuals who graduate with this degree have the skills and knowledge to lead, and advance in health professions.

The Health and Wellness Solutions Concentration includes preparation for entry into the Bachelor of Science in Nursing program, graduate-level Health Science degrees as well as post-graduate employment options that include but are not limited to Health & Wellness Coordinator, Community Health Worker, and Health Education Specialists.

## Bachelor of Science in Health Science Program Requirements

| | | |
|---|---|---|
| **General Education Requirements (https://catalog.tarleton.edu/academicaffairs/)** | | **42** |
| BIOL 2401 [shared] | Anatomy and Physiology I | |
| BIOL 2402 [shared] | Anatomy & Physiology II | |
| PSYC 2301 [shared] | General Psychology | |
| **Health Science Required Courses** | | |
| SOCI 1301 | Introductory Sociology | 3 |
| HLSC 1110 | Exploring Careers and Pathways in Health Science | 1 |
| HECO 1322 | Nutrition and Diet Therapy | 3 |
| ENGL 3309 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Professional Writing | 3 |
| KINE 1338 | Concepts of Physical Fitness | 3 |
| PBHL 1310 | Health and Society: An Introduction to Public Health | 3 |
| SOCI 4314 | Medical and Health Care Policy | 3 |
| KINE 3319 | Medical Terminology | 3 |
| NUTR 3321 | Life Cycle Nutrition | 3 |
| PBHL 2320 | Medical Ethics | 3 |
| PBHL 4310 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Introduction to Health Management and Policy | 3 |
| Internship Requirement | | 2 |
| PBHL 4085 | Seminar and Internship in Public Health | |
| **Total Hours** | | **75** |

### Health and Wellness Solutions (Includes Pre-Nursing)

Students intending to apply to Tarleton's traditional Nursing BSN program should select this concentration.

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|---|---|---|
| NUTR 3339 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Introduction to Medical Nutrition Therapy | 3 |

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|---|---|---|
| KINE 3385 | Program Design for Special Populations | 3 |
| KINE 3370 | Physiology of Exercise | 3 |
| KINE 4330 | Exercise Testing and Prescription | 3 |
| SOCW 4325 | Mental Health Care | 3 |
| PSYC 3311 | Behavior Analysis and Behavior Management | 3 |
| PSYC 2314 | Life Span Growth & Development | 3 |
| or PSYC 3307 | The Human Lifespan | |
| MGMT 3300 | Principles of Management | 3 |
| or MGMT 3350 | Organization Behavior | |
| MGMT 3304 | Small Business Management | 3 |
| MKTG 3312 | Marketing | 3 |
| PBHL 3310 | Principles of Health Promotion and Education | 3 |
| Choose 12 credits from the following | | 12 |
| MATH 1314 | College Algebra | |
| MATH 3450 | Principles of Bio-Statistics | |
| MATH 2412 | Precalculus Math | |
| MATH 1316 | Plane Trigonometry | |
| BIOL 2420 | Microbiology for Non-Science Majors | |
| CHEM 1407 | Fundamentals of Chemistry | |
| or CHEM 1311 & CHEM 1111 | College Chemistry I (Lecture) and College Chemistry I (Laboratory) | |
| BUSI 1307 | Personal Finance | |
| SOCW 3377 | Alcohol and Drug Abuse | |
| SOCW 3303 | Cross Cultural Social Work Practice | |
| SOCW 4325 | Mental Health Care | |
| KINE 2380 | Essentials of Personal Training | |
| KINE 2390 | Fundamentals of Group Exercise Training | |
| KINE 3304 | Orthopedic Assessment | |
| MGMT 3302 | Human Resource Management | |
| COMM 4304 | Organizational Communication | |
| HPTC 4349 | Pharmacology for the Allied Health Professionals | |
| HPTC 4350 | Pathophysiology for the Health Professionals | |
| ENGL 2366 | Death and Dying in Literature | |
| ENGL 3349 | Literature of Health, Medicine, and Science | |
| NUTR 4309 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Community Nutrition | |
| CHEM at 1xxx, 2xxx, 3xxx, 4xxx level | | |
| BIOL at 1xxx, 2xxx, 3xxx, 4xxx level | | |
| SPAN at 1xxx, 2xxx, 3xxx, 4xxx level | | |
| General Electives (max of 6 hours) | | |
| **Total Hours** | | **45** |

## Health Studies

| | | |
|---|---|---|
| MATH 1314 [shared] | College Algebra | |
| BIOL 1406 | Biology for Science Majors | 4 |
| BIOL 1407 | Biology for Science Majors II | 4 |
| CHEM 1311 | College Chemistry I (Lecture) | 3 |
| CHEM 1111 [shared] | College Chemistry I (Laboratory) | |
| CHEM 1312 | College Chemistry II (Lecture) | 3 |
| CHEM 1112 | College Chemistry II (Laboratory) | 1 |
| CHEM 2323 | Organic Chemistry I | 3 |
| CHEM 2123 | Organic Chemistry I Laboratory | 1 |
| BIOL 2300 | Cell Biology | 3 |
| BIOL 3303 | Genetics | 3 |
| BIOL 3407 | Microbiology | 4 |
| BIOL 4374 | Biochemistry I | 3 |
| MATH 3450 | Principles of Bio-Statistics | 4 |
| PSYC 3307 | The Human Lifespan | 3 |
| Choose 6 Hours from the following | | 6 |
| NUTR 4309 [WI (https://catalog.tarleton.edu/academicaffairs/)] | Community Nutrition | |
| KINE 3304 | Orthopedic Assessment | |
| KINE 3370 | Physiology of Exercise | |
| MGMT 3302 | Human Resource Management | |
| COMM 4304 | Organizational Communication | |
| SOCW 4325 | Mental Health Care | |

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|---|---|---|
| SOCW 3303 | Cross Cultural Social Work Practice | |
| SOCW 3377 | Alcohol and Drug Abuse | |
| ENGL 3349 | Literature of Health, Medicine, and Science | |
| ENGL 3368 | Rhetoric of Health, Medicine, and Science | |
| CHEM at 3xxx, 4xxx level | | |
| BIOL at 3xxx, 4xxx level | | |
| SPAN at 3xxx, 4xxx level | | |
| **Total Hours** | | **45** |

## Master of Science in Exercise Science

Tarleton State University, a member of the Texas A&M University System, offers the Master of Science in Exercise Science professional degree through its Department of Health and Human Performance in Fort Worth, Texas. The Master of Science in Exercise Sciences (MS-EXSC) offers students either a non-thesis track with an emphasis area in Tactical Physiology or a thesis track with an emphasis in Exercise Physiology. All degree options are thirty-six credit hours.

| | | |
|---|---|---|
| EXSC 5320 | Exercise Physiology | 3 |
| EXSC 5335 | Laboratory and Research Techniques in Exercise Science | 3 |
| HLSC 5310 | Statistics in Health Science I | 3 |
| HLSC 5330 | Research Methods I - Qualitative and Quantitative | 3 |
| NUTR 5378 | Nutrition in Sports and Exercise | 3 |
| Choose 6 Hours of the Following: [1] | | 6 |
| EXSC 5399<br>& EXSC 5380 | Internship<br>and Capstone in Exercise Science | |
| HLSC 5311<br>& HLSC 5331 | Statistics in Health Science II<br>and Research Methods II - Advanced Methodologies | |
| **Total Hours** | | **21** |

[1] Students completing the Thesis concentration should choose HLSC 5311 and HLSC 5331.

### Exercise Science

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|---|---|---|
| Choose 3 Credit Hours from the Following: | | 3 |
| EXSC 5325 | Exercise Prescription Through the Lifespan | |
| EXSC 5360 | Applied Neuromuscular Physiology | |
| Choose 3 Credit Hours from the Following: | | 3 |
| EXSC 5322 | Environmental Exercise Physiology | |
| EXSC 5365 | Applied Biomechanics | |
| Choose 9 Credit Hours from the Following: | | 9 |
| EXSC 5328 | Adapted Exercise and Sport | |
| EXSC 5333 | Theory of Exercise Programming and Evaluation | |
| EXSC 5335 | Laboratory and Research Techniques in Exercise Science | |
| EXSC 5337 | Tactical Human Performance Assessment & Monitoring | |
| EXSC 5340 | Motor Learning | |
| EXSC 5383 | Fitness and Wellness Applications in Athletic Training | |
| EXSC 5322 | Environmental Exercise Physiology | |
| EXSC 5360 | Applied Neuromuscular Physiology | |
| EXSC 5365 | Applied Biomechanics | |
| EXSC 5385 | Seminar | |
| EXSC 5086 | Problems | |
| **Total Hours** | | **15** |

### Tactical Human Performance

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|---|---|---|
| EXSC 5337 | Tactical Human Performance Assessment & Monitoring | 3 |
| EXSC 5333 | Theory of Exercise Programming and Evaluation | 3 |
| EXSC 5322 | Environmental Exercise Physiology | 3 |
| EXSC 5365 | Applied Biomechanics | 3 |
| Choose 3 Credit Hours from the Following: | | 3 |
| EXSC 5328 | Adapted Exercise and Sport | |
| EXSC 5325 | Exercise Prescription Through the Lifespan | |
| EXSC 5340 | Motor Learning | |
| EXSC 5360 | Applied Neuromuscular Physiology | |
| EXSC 5383 | Fitness and Wellness Applications in Athletic Training | |
| EXSC 5385 | Seminar | |
| EXSC 5086 | Problems | |
| **Total Hours** | | **15** |

### Thesis

| | | |
|---|---|---|
| EXSC 5088 | Thesis | 6 |
| Choose 9 Credit Hours from the Following: | | 9 |
| EXSC 5322 | Environmental Exercise Physiology | |
| EXSC 5328 | Adapted Exercise and Sport | |
| EXSC 5333 | Theory of Exercise Programming and Evaluation | |
| EXSC 5337 | Tactical Human Performance Assessment & Monitoring | |
| EXSC 5340 | Motor Learning | |
| EXSC 5360 | Applied Neuromuscular Physiology | |
| EXSC 5365 | Applied Biomechanics | |
| EXSC 5383 | Fitness and Wellness Applications in Athletic Training | |
| EXSC 5385 | Seminar | |
| EXSC 5086 | Problems | |
| **Total Hours** | | **15** |

## Master of Science in Rehabilitation Science

Tarleton State University, a member of the Texas A&M University System, offers the Master of Science in Rehabilitation Sciences professional degree through its Department of Health and Human Performance in Fort Worth, Texas. The Master of Science in Rehabilitation Sciences (MS-RHSC) offers students either a non-thesis track with an emphasis area in or a thesis track with emphasis in Rehabilitative Physiology. All degree options are thirty-six credit hours.

| | | |
|---|---|---|
| HLSC 5310 | Statistics in Health Science I | 3 |
| HLSC 5320 | Research Ethics for Health Sciences | 3 |
| HLSC 5330 | Research Methods I - Qualitative and Quantitative | 3 |
| RHSC 5340 | Laboratory Techniques in Rehabilitation Science | 3 |
| RHSC 5350 | Disability and Rehabilitation | 3 |
| RHSC 5360 | Theories & Mechanisms of Change in Rehabilitation Science | 3 |
| **Total Hours** | | **18** |

### Capstone Track

| | | |
|---|---|---|
| RHSC 5325 | Public Health & Population Wellbeing | 3 |
| RHSC 5380 | Capstone in Rehabilitation Science | 3 |
| RHSC 5390 | Internship in Rehabilitation Science | 3 |
| Pick 3 from the following courses: | | 9 |
| KINE 5360 | Applied Neuromuscular Physiology | |
| KINE 5365 | Applied Biomechanics | |
| KINE 5320 | Exercise Physiology | |
| RHSC 5338 | Lifestyle Medicine | |
| RHSC 5346 | Cardiopulmonary Rehabilitation | |
| RHSC 5355 | Neuromuscular Aspects of Fatigue and Training | |
| RHSC 5370 | Human Neuroplasticity | |
| RHSC 5375 | Rehabilitation Science in Professional Sports | |
| RHSC 5377 | Exercise for Clinical Populations | |
| **Total Hours** | | **18** |

### Thesis Track

| | | |
|---|---|---|
| Thesis Course | | 6 |
| KINE 5088 | Thesis | |
| HLSC 5311 | Statistics in Health Science II | 3 |
| HLSC 5331 | Research Methods II - Advanced Methodologies | 3 |
| Pick 2 from the following: | | 6 |
| KINE 5320 | Exercise Physiology | |
| KINE 5365 | Applied Biomechanics | |
| KINE 5360 | Applied Neuromuscular Physiology | |
| RHSC 5338 | Lifestyle Medicine | |
| RHSC 5346 | Cardiopulmonary Rehabilitation | |
| RHSC 5355 | Neuromuscular Aspects of Fatigue and Training | |
| RHSC 5370 | Human Neuroplasticity | |
| RHSC 5375 | Rehabilitation Science in Professional Sports | |
| RHSC 5377 | Exercise for Clinical Populations | |
| RHSC 5325 | Public Health & Population Wellbeing | |
| **Total Hours** | | **18** |

## Exercise Physiology Courses

**EXPH 1301. Introduction to Applied Exercise and Sport Physiology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This foundational course provides an overview of the field of exercise science, covering key concepts in anatomy, physiology, biomechanics, and nutrition as they relate to human movement and physical activity. Students will explore career opportunities within the field, including fitness training, rehabilitation, and sports performance. The course also introduces basic principles of exercise testing, program design, and the role of physical activity in health promotion and disease prevention.

**EXPH 3170. Exercise Physiology Lab. 1 Credit Hour (Lecture: 0 Hours, Lab: 2 Hours).**
This lab-based course provides hands-on experience in assessing physiological responses to exercise. Students will learn to measure and analyze variables such as heart rate, blood pressure, oxygen consumption, and lactate levels during exercise testing. The course emphasizes practical skills in exercise testing protocols, data collection, and interpretation, supporting theoretical concepts from exercise physiology lectures. Corequisite: KINE 3370.

**EXPH 3331. Motor Control. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course explores the neuromuscular processes that govern human movement, focusing on how the brain and body coordinate to produce skilled actions. Topics include the principles of motor learning, control systems in movement, sensorimotor integration, and adaptations following injury or training. Students will apply these principles to sports performance, rehabilitation, and skill acquisition.

**EXPH 3345. Bioenergetics & Supplementation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course covers the bioenergetic processes that supply energy for physical activity, from cellular respiration to metabolic pathways. Students will explore how different forms of exercise influence energy systems and how dietary supplementation can enhance performance and recovery. The course also reviews the efficacy and safety of common supplements used by athletes.

**EXPH 3360. Essentials of Strength Training & Conditioning. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course provides an in-depth exploration of strength training and conditioning principles. Students will study methods for developing muscular strength, endurance, power, speed, agility, and flexibility. The course integrates evidence-based practices in program design, exercise technique, and training progression, with an emphasis on safety, performance enhancement, and injury prevention.

**EXPH 4184. Internship in Applied Exercise and Sport Physiology. 1 Credit Hour (Lecture: 1 Hour, Lab: 0 Hours).**
Designed to provide students with practical, hands-on experience in the application of exercise science principles. The main goal is to bridge the gap between theoretical knowledge gained in the classroom and real-world application in clinical, athletic, or fitness settings. Key components of the internship may include: Clinical Exercise Testing and Prescription, Exercise Program Development, Performance Analysis, Research and Data Analysis, and/or Communication and Collaboration.

**EXPH 4360. Sport & Performance Analytics. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course introduces the use of data analytics in sports performance. Students will learn to collect, analyze, and interpret performance data using modern technology and statistical methods. Topics include performance monitoring, athlete tracking, load management, and data-driven decision-making for performance optimization in individual and team sports.

**EXPH 4380. Programming & Periodization. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course focuses on designing and implementing exercise training programs for athletes and fitness enthusiasts. Students will learn the principles of periodization, including how to structure training cycles to optimize performance while minimizing injury risk. Topics include strength, power, endurance, and recovery protocols, with emphasis on individualized program design based on specific goals.

**EXPH 4395. Applied Biomechanics. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Explores the mechanical principles underlying human movement and how these principles apply to physical activities and athletic performance. This course provides students with an in-depth understanding of the forces, motion, and structure of the human body during movement. Topics covered include: Kinematics and Kinetics, Musculoskeletal Mechanics, Movement Analysis, Injury Prevention and Rehabilitation, Sports Performance. Prerequisite: KINE 4390.

## Exercise Science Courses

## Kinesiology Courses

**KINE 1000. TCC Dual Admit. 0 Credit Hours (Lecture: 0 Hours, Lab: 0 Hours).**

**KINE 1105. Health-Related Fitness and Activity. 1 Credit Hour (Lecture: 1 Hour, Lab: 0 Hours).**
This course is designed to facilitate opportunities for students to engage in physical activity in a wide variety of different ways that fit into their personal schedules. The course is heavily field-based with activities scheduled at a variety of different days and times at Campus Recreation facilities. Students earn activity credit by participating in these group exercise sessions. The supporting content of the course is completed in Learning Management System. NOTE: KINE 1105, 1205, and 1305 are repeatable courses. However, no more than 6 semester-hours of activity credit may be counted toward any degree at Tarleton.

**KINE 1205. Health-Related Fitness and Activity. 2 Credit Hours (Lecture: 2 Hours, Lab: 0 Hours).**
This course is designed to facilitate opportunities for students to engage in physical activity in a wide variety of different ways that fit into their personal schedules. The course is heavily field-based with activities scheduled at a variety of different days and times at Campus Recreation facilities. Students earn activity credit by participating in these group exercise sessions. The supporting content of the course is completed in Learning Management System. NOTE: KINE 1105, 1205, and 1305 are repeatable courses. However, no more than 6 semester-hours of activity credit may be counted toward any degree at Tarleton.

**KINE 1210. Archery. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
An introductory study of target archery. This course will include history, skills of shooting, equipment, and safety.

**KINE 1218. Golf. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to provide instruction in the basic skills of golf; putting, chipping, pitching, and full swing. An additional fee is required for facility rental and equipment use. Students must provide their own transportation to Legends Golf Course & Driving Range.

**KINE 1220. Fitness Walking. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to reduce sedentary lifestyles and enhance overall health & fitness by increasing cardiovascular endurance, muscular strength & endurance, and improve body composition.

**KINE 1221. Cardio Fitness. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to enhance overall health & fitness by increasing cardiovascular endurance, muscular strength & endurance, and improve body composition. Students are encouraged to refrain from a sedentary lifestyle. Activities include walking, indoor cycling, indoor rowing, and other aerobic activities.

**KINE 1222. Racquet Sports. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course provides students with an opportunity to experience and learn a wide variety of racquet sports such as: racquetball, badminton, pickleball, speedminton, and others. The course is designed to teach the basic rules, regulations and skills of each racquet sport.

**KINE 1223. Swimming. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
Basic and advanced swimming technique, water safety procedures, and the development of health-related fitness.

**KINE 1224. Scuba Diving. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course teaches the PADI Open Water Diver scuba curriculum through a combination of classroom and water instruction. Students pay a fee directly to a PADI certified instructor for scuba equipment rental, air fills, text book, and ancillary materials. Students provide their own headgear and footgear. Basic swimming skills are required. Upon successful completion of this course, students have up to one year to achieve certification by independently completing their final lake dives through a certified PADI instructor.

**KINE 1225. Advanced Scuba Diving. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course teaches the PADI Advanced Open Water Diver scuba curriculum through a combination of classroom and water instruction. Students pay a fee directly to a PADI certified instructor for scuba equipment rental, air fills, text book, and ancillary materials. Students provide their own headgear and footgear. Basic swimming skills are required. Prerequisite: PADI Open Water Diver certification or equivalent from an accredited scuba training organization.

**KINE 1226. Lifeguarding. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to meet American Red Cross (ARC) requirements related to lifeguarding and basic water safety skills. Upon successful completion of the course, the student will be awarded the American Red Cross Lifeguard Training certificate and CPR/AED/First Aid certification for Lifeguards. An additional fee is required to cover ARC textbook, ARC ancillary materials, and ARC certification cards. Basic swim skills are required. Prerequisites: Must be 15+ years of age, able to swim 500 yards, able to retrieve an object from under 10 feet of water, and able to tread water for 2 minutes without the use of the hands.

**KINE 1230. Powerlifting. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to provide a competitive weight lifting program for both novice and advanced lifters. Instruction will focus on exercise techniques, training principles, programming, and practical strength training application. The course will concentrate on improving the individual's 1-rep max in Squat, Deadlift and Bench Press by using different methods of resistance exercises. An optional fee is necessary for students who want to travel to competitive powerlifting events; the optional fee will be used to cover entry fees and travel to/from event.

**KINE 1231. Strength Bootcamp. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to promote the overall health & wellness benefits of strength training by incorporating High Intensity Interval Training (HIIT) in a motivating bootcamp setting. Traditional calisthenics, body weight exercises, speed work, agility drills, power development, reaction time, and balance workout will be designed to address and improved: cardiovascular endurance, muscular strength and endurance, flexibility and body composition.

**KINE 1232. Weight Training. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to teach the beginning weight training student the various types and benefits of strength training.

**KINE 1233. Aerobic Dance. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is design to explore dance as an aerobic exercise option as well as develop an appreciation for wellness by participating in various styles of dance.

**KINE 1235. Aquatic Fitness. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed for students to engage in basic water resistance exercises, shallow water plyometrics, stretching and strength exercises, and deep water muscular endurance exercises. This is an excellent opportunity to engage in a low-impact alternative to land-based fitness activities. No previous experience or aquatic expertise is required for this class.

**KINE 1236. Dance Techniques & Fundamentals. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to provide a basic foundation of dance with an emphasis on the fundamentals of dance. The class will consist of beginner ballet, jazz, hip hop, and modern dance techniques. The artistry and physicality of dance will be emphasized.

**KINE 1237. Innovative Dance. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
Intermediate level course that continues the exploration of ballet, jazz, hip hop, and modern dance techniques. Pom techniques will also be introduced. NOTE: Basic foundation of dance techniques & fundamentals or successful completion of KINE 1236 (Dance Techniques & Fundamentals) is encouraged. Prerequisite: This course is highly recommended for students interested in auditioning to become a member of the Texan Stars dance team or for current members of the Texan Stars dance team.

**KINE 1240. Dance Performance. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed for individuals who are members of the Texan Stars Dance team or Tarleton Cheer teams. It shall serve as a support group for school events/activities and promote school loyalty and spirit. NOTE: This course is intended for students currently participating on the Texan Stars or Texan Cheer teams at Tarleton State University. Prerequisites: Student must submit application, meet fitness and performance standards, and participate in a formal try-out. Please contact the Director of the Texan Stars or the Director of Texan Cheer for more information.

**KINE 1241. Global Sports I - Rugby, Soccer, Sand Volleyball. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed provide a sample of games and sports that are played on an international level. The games and sports taught within this course will include, but are not limited to: Rugby, Soccer, and Sand Volleyball.

**KINE 1242. Global Sports II - Lacrosse, Cricket, Team Handball. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed provide a sample offering of games and sports that are played on an international level. The games and sports taught within this course will include, but are not limited to: Lacrosse, Cricket, Team Handball.

**KINE 1243. Disc Golf. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course introduces the fundamentals of disc golf. Emphasis is placed on basic throwing techniques, putting, distance driving, scoring, and single and doubles play. Tournament and match play formats will also be introduced. NOTE: Basic equipment will be provided; however, students will be required to purchase specialty discs and carrying bag. Students must provide their own transportation to the Stephenville City Park.

**KINE 1244. Rock Climbing. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course introduces students to top-rope rock climbing and bouldering techniques in both an indoor and outdoor environment. Topics include equipment, knots, belaying, rappelling, anchor systems, and a range of climbing techniques. Risk assessment and safety techniques are thoroughly addressed throughout the course. NOTE: An additional fee is required for facility rental and equipment use. A day trip (1 day) to Mineral Wells State Park will be required; students must provide their own transportation to the park and pay their entry fee.

**KINE 1245. 5K / 10K Training. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
The course is designed for students who are interested in inspirational exercise, goal setting, and personal improvement through social & competitive walking and/or running. The course will begin with low intensity, short distance training before progressing into a more aggressive training scheme. The course will cover proper walking & running mechanics, types of training (5K, 10K, Trail Runs), weather conditions, and the benefits of cardiovascular training. NOTE: Students will be required to register and complete two events (5K, 10K, Color Run, Mud Run, Spartan Run, etc.). The entry fee for each event and transportation to/from the events will be the responsibility of the student.

**KINE 1246. Hunting and Fishing. 2 Credit Hours (Lecture: 2 Hours, Lab: 2 Hours).**
This course is designed for outdoor enthusiasts. Students will learn fundamental firearm safety, fishing rules and regulations, hunting rules and regulations, environmental recognition (aquatic life and wild-game species), license and permit procedures, general outdoors law, seasonal guidelines and conservation methods. The 'Texas Parks and Wildlife Outdoor Annual Hunting and Fishing Regulations' will serve as the foundation for this course. FISHING: Basic fishing gear will be provided; however, students may bring their own fishing gear. Three day trips to area lakes will be required; students must provide their own transportation to the lakes. Students must purchase a Texas fishing license. HUNTING: An additional fee is required to cover ammunition and targets. Students must provide their own transportation to the shooting range. Two day trips to area game ranches will be required; students must provide their own transportation to the ranches. Students must purchase and pass a Hunter Safety course.

**KINE 1247. Trap and Skeet Shooting. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course is designed to introduce students to trap and skeet shooting as well as discuss proper firearm and ammunition selection. Firearm safety and range etiquette will be strongly emphasized. An additional fee is required to cover ammunition and targets. Students must provide their own firearm plus ear and eye protection. Students must provide their own transportation to the shooting range.

**KINE 1248. Yoga I. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
This course explores the asnas (poses) and vinyasa (flow) of yoga intended to target physical postures, breathing, relaxation, and mental concentration.

**KINE 1249. Yoga II. 2 Credit Hours (Lecture: 1 Hour, Lab: 2 Hours).**
Intermediate level course that continues the exploration of mind and body through asana (poses). This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. The goal is to improve yoga practice and to develop an overall deeper understanding of yoga methodology through advanced postures, breathing techniques and relaxation practices. NOTE: Previous yoga experience or successful completion of Yoga I (KINE 1248) is encouraged. Prerequisite: Previous yoga experience or successful completion of Yoga I (KINE 1248) is encouraged.

**KINE 1250. Varsity Athletics. 2 Credit Hours (Lecture: 2 Hours, Lab: 0 Hours).**
This course is designed to introduce the student to competitive intercollegiate athletics. The student will be prepared both mentally and physically to participate and to take part in intercollegiate athletic competitions. NOTE: This course is intended for student-athletes currently participating on a NCAA athletic team at Tarleton State University.

**KINE 1301. Foundations of Kinesiology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
An introductory course in the field of Kinesiology. Included will be the history of physical education and sport, career opportunities in Kinesiology, and objectives and principles of Kinesiology.

**KINE 1305. Health-Related Fitness and Activity. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course is designed to facilitate opportunities for students to engage in physical activity in a wide variety of different ways that fit into their personal schedules. The course is heavily field-based with activities scheduled at a variety of different days and times at Campus Recreation facilities. Students earn activity credit by participating in these group exercise sessions. The supporting content of the course is completed in Learning Management System. NOTE: KINE 1105, 1205, and 1305 are repeatable courses. However, no more than 6 semester-hours of activity credit may be counted toward any degree at Tarleton.

**KINE 1306. First Aid and CPR. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
An examination and application of first aid, CPR, and emergency procedures given to victims of accident and illness.

**KINE 1308. Sports Officiating. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
A course designed to teach the rules and mechanics of sports officiating in football, basketball, volleyball, and baseball/softball. Students will be required to assist in a variety of officiating activities outside the formal classroom.

**KINE 1338. Concepts of Physical Fitness. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The study of the principles and techniques needed to promote human health and hygiene. Topics will include but not be limited to: fitness assessment and skills, personal awareness and management techniques, self-motivation, proper nutrition, responsibility, and health choices as related to wellness. Health-related physical fitness labs for testing skills and strategies will be conducted. Lab fee: $2.

**KINE 2310. Fundamentals of Sport Pedagogy. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Overview of the physical education profession, including: philosophy, professional standards, program outcomes, appropriate practices, and factors impacting the learning environment. Field-based experience applying course content is a course requirement.

**KINE 2315. History and Philosophy of Sport, Recreation, and Exercise. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course will examine the history and philosophy of physical activity, most notably in relation to the United States. Included areas of study are the exercise sciences, as well as physical education, recreation, and organized sport.

**KINE 2319. Medical Terminology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Medical Terminology introduces the language of science and healthcare. Students acquire knowledge and vocabulary by learning prefixes, suffixes, stem and root words, and compound medical terms for appropriate and accurate communication. Other areas include anatomy, physiology, pathology, equipment, diagnosis, and treatment.

**KINE 2320. Anatomical Kinesiology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Investigation and analysis of human motion in relationship to structure and function according to general mechanical laws and other factors. Prerequisite: BIOL 2401.

**KINE 2323. Coaching Track and Field. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course examines the fundamental preparation, operation, expertise, and management necessary to coach and conduct a track and field program. Students learn about rules, techniques, tactics, season planning, strategy, and applications related to the coaching of track and field. The sport of cross country will be included.

**KINE 2330. Individual and Dual Sport Skills. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course is designed to provide quality instruction in individual and dual sports skills and activities. It consists of basic knowledge of rules and strategies, planning and implementing quality instruction, and skills testing in selected lifetime sports. Prerequisite: KINE 1301.

**KINE 2340. Team Sport Skills. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course is designed to provide quality instruction in team sport skills and activities. It consists of basic knowledge of rules and strategies, planning and implementing quality instruction, and skills testing in selected team sports. Prerequisite: KINE 1301.

**KINE 2356. Prevention and Care of Athletic Injuries. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The study and application of skills in the prevention and care of injuries affecting the athlete and physically active. Prerequisite: BIOL 2401 Lab fee: $2.

**KINE 2360. Principles of Athletic Coaching. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The course is designed to present foundational knowledge essential for coaching any level athlete in any sport. Emphasis is on a comprehensive approach to the foundations and theories of coaching, including the development of a coaching philosophy, determining coaching objectives, coaching for character, coaching at various levels, motivational techniques, as well as principles of teaching, physical training, and management.

**KINE 2380. Essentials of Personal Training. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course is designed to prepare and qualify students to work as personal trainers. The course bridges the gap between exercise science-related course work and the practical application skills in preparation for a national certification exam in personal training. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming. An additional fee is required to cover the costs of the national certification exam, textbooks, and ancillary material. BIOL 2401 recommended.

**KINE 2390. Fundamentals of Group Exercise Training. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course is designed to give students the knowledge and understanding necessary to prepare for the ACE Group Fitness Instructor Certification Exam and become effective group fitness instructors. An additional fee is required to cover the costs of the certification exam, textbooks, and ancillary material.

**KINE 3304. Orthopedic Assessment. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The study and application of principles and techniques for assessment of orthopedic injuries and dysfunctions including signs and symptoms, classification of injuries, and emergency and clinical assessment. Prerequisites: KINE 2356 and BIOL 2401 Lab fee: $2.

**KINE 3310. Tests and Measurements. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Use and function of tests in Exercise and Sport Studies. Test construction and interpretation will be studied. Statistical techniques will be reviewed. Prerequisites: 12 hours of Kinesiology course work and junior classification. Lab fee: $2.

**KINE 3314. Therapeutic Exercise and Rehabilitation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The study and application of therapeutic exercise tools and techniques in the rehabilitation of injuries including restoration of flexibility and range of motion, muscular strength, endurance and power, cardiorespiratory endurance, and neuromuscular control and balance. Prerequisites: KINE 2356 and BIOL 2401. Lab Fee: $2.

**KINE 3319. Medical Terminology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Medical Terminology is the interdisciplinary study of the language of science and healthcare. Students acquire knowledge and vocabulary by learning prefixes, suffixes, stem and root words, and compound medical terms for effective and accurate communication within the healthcare industry.

**KINE 3320. Theory of Strength Training and Conditioning. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The study and survey of contemporary strength training and conditioning. Successful completion of the course allows the student to sit for the appropriate examinations relative to being certified as a Strength and Conditioning Specialist. Conditioning Specialist. Prerequisite: BIOL 2401 Lab fee: $2.

**KINE 3322. Coaching Pedagogy. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course explores the principles and practices of coaching pedagogy, with a focus on games-based models and their application in sport and physical activity settings. Prerequisite: KINE 3330 or concurrent enrollment.

**KINE 3325. Theory of Sport Management. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
A study of the theories, concepts, and research associated with sport management including career preparation skills and professional opportunities available in the industry.

**KINE 3326. Outdoor Adventure. 3 Credit Hours (Lecture: 2 Hours, Lab: 2 Hours).**
Outdoor resources and adventure activities are utilized as opportunities for experiential learning. Activities can include the Tarleton Challenge Course, hiking, backpacking, camping, mountaineering, rock climbing, biking, canoeing, kayaking, orienteering, safety and first aid. Lab fee: $2.

**KINE 3328. Teaching Outdoor Education and Recreation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course explores the principles and evidence-based practices for teaching outdoor education and recreation. Through hands-on activities and reflective practice, students will develop the knowledge, skills, and values necessary to design, facilitate, and evaluate outdoor learning experiences. Emphasis is placed on activities that promote physical, social, and emotional well-being; environmental stewardship; teamwork; and leadership development. Designed for aspiring educators, coaches, recreation leaders, and outdoor professionals, this course equips students with the tools to foster meaningful, safe, and inclusive outdoor experiences in school, community, and recreational settings.

**KINE 3330. Motor Behavior. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours). [WI (https://catalog.tarleton.edu/academicaffairs/)]**
This course explores the principles of motor behavior, including motor development, motor learning, and motor control. Students will examine how individuals acquire and refine motor skills across the lifespan and the factors that influence skill performance and movement efficiency. The course integrates theoretical frameworks with practical applications to enhance understanding of motor skill acquisition, neural and biomechanical movement control, and instructional strategies for optimizing motor learning in various settings. Lab fee $2.

**KINE 3332. Coaching Pedagogy. 3 Credit Hours (Lecture: 2 Hours, Lab: 2 Hours).**
This course explores the principles and practices of coaching pedagogy, with a focus on games-based models and their application in sport and physical activity settings. Prerequisite: KINE 3330 or concurrent enrollment.

**KINE 3333. Tactical Strength and Conditioning. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Built on scientific principles and evidence-based research, the NSCA Tactical Strength and Conditioning (TSAC) Training Course is a foundational strength and conditioning program designed to provide tactical facilitators with the tools to decrease injury risk and increase longevity and effectiveness of tactical professionals. The TSAC Practitioners Course provides the principles of program design, basics of coaching exercise technique and mechanics, and how to lead a physical readiness program. An additional fee is required to cover the costs of the certification exam, textbooks, and ancillary material. Prerequisite: NA.

**KINE 3342. Teaching Fundamental Movement, Rhythm, and Dance. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course explores the principles and evidence-based practices of teaching fundamental movement skills and rhythmic dance. Through hands-on activities and reflective practice, students will develop the knowledge, skills, and values necessary to design, facilitate, and evaluate movement programs. Emphasis is placed on strategies and activities that foster physical literacy, coordination, spatial and rhythmic awareness, creativity, and self-expression through movement. Designed for aspiring educators, coaches, and recreation leaders, this course equips students with the tools to foster meaningful, safe, and inclusive experiences in school, community, and recreational settings. Prerequisite: KINE 3330.

**KINE 3345. Sport Leadership. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours). [WI (https://catalog.tarleton.edu/academicaffairs/)]**
This course is designed to give students a foundational understanding of key leadership principles and theories. Students will study concepts such as servant leadership, transformational leadership, and ethics in leadership, among many other important topics.

**KINE 3350. Corrective Exercise Training. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course will present an evidence-based approach to corrective exercise, the components of a comprehensive solution, and the practical know-how to develop and implement integrated strategies to improve common movement impairments. Students completing this course will be prepared to take NASM's Corrective Exercise Specialist credentialing examination. An additional fee is required to cover the costs of the certification exam, textbooks, and ancillary material.

**KINE 3352. Principles of Health and Fitness for Children. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
A survey of the essential knowledge and skills of health and physical education as they relate to children ages 6-14. Included will be skills related to personal health and safety, physical fitness, motor development, games and sports, gymnastics, and rhythmic activities.

**KINE 3355. Principles of Health and Physical Education In Elementary Schools. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The knowledge, skills, and dispositions for teaching developmentally appropriate health and physical education in elementary schools.

**KINE 3358. Teaching Fitness Education. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course explores principles and evidence-based practices for teaching fitness education. Through hands-on activities and reflective practice, students will develop the knowledge, skills, and values necessary to design, facilitate, and evaluate fitness programs. Emphasis is placed on activities that foster physical and nutritional literacy and promote lifelong physical, social, and emotional well-being. Designed for aspiring educators, coaches, recreation leaders, and wellness professionals, this course equips students with the tools to foster meaningful, safe, and inclusive fitness programs in school, community, and recreational settings. Prerequisite: KINE 1338.

**KINE 3360. Sports Nutrition. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours). [WI (https://catalog.tarleton.edu/academicaffairs/)]**
This course covers the essentials of human nutrition that improve and sustain optimal performance for sport and exercise. The effects of eating disorders (in both male and female athletes), weight management, sport supplements, and application of nutritional concepts related to the physically active individual seeking improved athletic performance will be addressed. An additional fee is required to cover the costs of the certification exam, textbooks, and ancillary material.

**KINE 3365. Principles of Health and Physical Education In Secondary Schools. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours). [WI (https://catalog.tarleton.edu/academicaffairs/)]**
The knowledge, skills, and dispositions for teaching developmentally appropriate health and physical education in secondary schools.

**KINE 3368. Performance-Based Assessment. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours). [WI (https://catalog.tarleton.edu/academicaffairs/)]**
This course explores the principles and evidence-based practices of performance-based assessment in physical education and sport coaching with an emphasis on writing for test-based and professional purposes. Through hands-on activities and reflective practice, students will develop the knowledge and skills necessary to design, implement, and evaluate assessment plans that align with standards-based curricula and program goals, as well as writing about and revising those assessment plans with input from students and faculty. Students will also assess skill proficiency, tactical and strategic understanding, and interpersonal and intrapersonal skills; provide meaningful feedback on written artifacts; promote learning and motivation; inform planning, instruction, and overall improvement of physical education and sport programs. Designed for aspiring educators, coaches, and recreation leaders, students will be prepared to apply effective performance-based assessment strategies in clearly written communication in physical education and sport settings.

**KINE 3370. Physiology of Exercise. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Effects of physical exercise on body processes. Prerequisite: BIOL 2401 Lab fee: $2.

**KINE 3372. Introduction to Sport Analytics. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course provides a comprehensive introduction to the rapidly growing field of sports analytics, focusing on how data is used to enhance organizational performance, make strategic decisions, and improve overall outcomes in sports. Students will explore the fundamental concepts of statistics, data collection, and analysis techniques used in sports contexts, along with the tools and technologies that enable sports teams, organizations, and athletes to make data-driven decisions. Key topics covered in the course include basic statistical analysis and data interpretation, player performance metrics and advanced analytics (e.g., player efficiency ratings, win shares, expected goals), the application of machine learning and predictive modeling in sports, analysis of team strategy, game dynamics, and opponent evaluation, and the ethical considerations and challenges in sports data usage. Through case studies, hands-on projects, and the use of industry-standard software, students will gain the practical skills necessary to evaluate sports data, develop predictive models, and assess key performance indicators across various sports, including baseball, football, basketball, and more. This course is ideal for anyone interested in pursuing a career in sports analytics, sports management, or data science within the sports industry.

**KINE 3375. Legal Issues in Sport and Recreation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
The course is designed to examine the legal issues involved in the supervision, management, and business operations of sport and recreation organizations. Students are provided with an introduction to various areas of law including: tort law, contract law, agency law, employment law, constitutional law, and product liability.

**KINE 3380. Adapted Physical Activity. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
An introduction to adapted physical activity, including physical education, recreation, leisure, and sport for individuals with disabilities of all ages. Practical application with individuals with special needs is a course requirement.

**KINE 3385. Program Design for Special Populations. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
An in depth study of the positive effects of exercise on the performance and quality of life of specific disease populations. The course teaches the student to design and modify exercise programs to fit the individual's needs. This course is taught using the ISSA Exercise Therapy curriculum. An additional fee is required to cover the costs of the certification exam, textbooks, and ancillary material.

**KINE 3390. Kinesiology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Investigation and analysis of human motion in relationship to structure and function according to general mechanical laws and other factors. Prerequisite: BIOL 2401.

**KINE 4085. Seminar. 1-3 Credit Hours (Lecture: 1-3 Hours, Lab: 0 Hours).**
This course will focus on current topics and issues of interest in exercise and sport studies. It may be repeated for credit as topics change. Prerequisites: Junior-level standing or approval of department head.

**KINE 4086. Problems. 1-6 Credit Hours (Lecture: 0 Hours, Lab: 1-6 Hours).**
Directed study of selected problems in Kinesiology. May be repeated for credit with approval of department head. Restricted to Kinesiology majors and minors.

**KINE 4302. Psychological Aspects of Sports. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course explores the psychological principles and theories that influence sport performance, participation, and coaching. Topics include personality, motivation, confidence, visualization, anxiety, team dynamics, leadership, mental skills training, and the psychological effects of injury and rehabilitation. Students will examine how psychological factors impact athletic performance and how psychological skills training can enhance sport and exercise participation for individuals and teams. Practical applications of sport psychology principles for coaches, athletes, and fitness professionals will be emphasized. Prerequisite: Junior or higher classification.

**KINE 4305. Capstone in Kinesiology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Applied learning experience for Kinesiology majors. Students will complete capstone experiences within the department including professional development points, health related fitness components, interview and etiquette skills, resume and portfolio. Prerequisite: Senior classification (90 hours, counting in progress hours) REQUIRED.

**KINE 4330. Exercise Testing and Prescription. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Physiology of exercise in the treatment of the degenerative effects of sedentary lifestyles associated with chronic disease and/or disabilities. Prerequisite: KINE 3370 or KINE 4320. Lab fee: $2.

**KINE 4335. Applications in Clinical Exercise Physiology. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Advanced course in clinical exercise testing and prescription in individuals with chronic diseases of cardiovascular, pulmonary, metabolic, musculoskeletal, neuromuscular, and immunologic origin. Students will be actively engaged in testing and prescribing exercise for actual clients in a laboratory setting. Prerequisite: previous or current enrollment in KINE 4330 Lab fee: $2.

**KINE 4340. Exercise Electrocardiography. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
A study of the rate, rhythm, and axis of the heart obtained during graded exercise testing. Prerequisites: BIOL 2401 and KINE 3370 Lab fee: $2.

**KINE 4350. Recreational and Sport Facility Management. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course introduces students to the concepts, theories and practices related to the administration and management of athletic, physical activity, and recreational facilities. The course is designed to familiarize students with the basic concepts of facility planning, construction, facility operations, event planning, security, and finance. Areas under examination include facilities for scholastic, intercollegiate, amateur, professional, international and recreational sport.

**KINE 4352. Sport Policy. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course provides an in-depth exploration of sport policy, examining the frameworks, strategies, and regulatory environments that shape the world of sports at local, national, and international levels. Students will analyze the impact of government policies, private sector initiatives, and organizational decisions on sports development, participation, and governance. Key topics include the role of policy in promoting health, equity, and inclusion, as well as addressing challenges related to funding, ethics, and sustainability in sports. Through case studies, real-world examples, and policy analysis, students will gain an understanding of the relationship between sport and society and the influence of policy on performance, grassroots initiatives, and global sports events. The course will also cover the evolving nature of sport policy, from issues of doping and anti-corruption measures to the increasing importance of social justice and diversity in the sports landscape. By the end of the course, students will be equipped with the tools to critically evaluate and shape sport policies, with an understanding of the broader societal, economic, and political forces at play. Ideal for students interested in working within sports management, governance, and policy-making, as well as those seeking to understand the societal influence of sport in modern times.

**KINE 4355. Sport Governance. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Focused on the fundamental aspects of policy, legal and ethical issues, and administrative decision-making within any sport-related organization. Students are exposed to key industry concepts such as strategic management, ethics and event planning activities, in addition to governance and policy related topics such as scholastic, intercollegiate and amateur sport.

**KINE 4360. Theory of Strength Training and Conditioning II. 3 Credit Hours (Lecture: 2 Hours, Lab: 2 Hours).**
An in depth study of the effects of strength and conditioning on performance. This course is designed to be a follow up course to KINE 3320 and will help students further the knowledge and skills expected of a Certified Strength and Conditioning Specialist as defined by the NSCA. An additional fee is required to cover the costs of the certification exam, textbooks, and ancillary material. Prerequisite: KINE 3320 Lab fee: $2.

**KINE 4370. Organization and Administration of Sport and Recreation. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course will study the principles, practices, and procedures in the organization and administration of sport and recreation.

**KINE 4375. Sport Tourism. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course delves into the dynamic and growing field of sport tourism, exploring the intersection of travel, tourism, and sports. Students will examine how sports events, destinations, and activities contribute to the global tourism industry, focusing on both the economic and cultural impacts. Topics covered include the planning, management, and marketing of sport tourism experiences, as well as the roles of various stakeholders, such as event organizers, tourism authorities, and local communities. Through case studies of major sporting events, such as the Olympics, World Cups, and regional sports festivals, students will gain insight into the logistics of hosting international sport tourism events, along with their potential for promoting destinations and driving economic development. Additionally, the course will address niche markets within sport tourism, including adventure tourism, eco-tourism, and wellness tourism, highlighting the diversity of experiences available to travelers. By the end of the course, students will be equipped with the knowledge to critically assess the role of sport tourism in destination marketing, sustainability, and the development of the tourism economy. This course is perfect for students aiming to pursue careers in tourism management, event planning, sports marketing, or those interested in the broader impacts of sports on global travel and tourism industries.

**KINE 4384. Clinical Internship in Kinesiology. 3 Credit Hours (Lecture: 1 Hour, Lab: 10 Hours).**
Supervised internship with selected agencies and organizations.

**KINE 4390. Biomechanics. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
This course is designed to study the mechanics of human movement. The course design provides insight into the basic laws governing the forces of stability and motion. Interpretation and understanding of biomechanical principles will be addressed to enable coaches, athletic trainers, fitness, and clinical professionals to optimize human performance and rehabilitation. Prerequisites: BIOL 2401, and either KINE 3390 or KINE 2320.

**KINE 4395. Sport Promotion and Public Relations. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours). [WI (https://catalog.tarleton.edu/academicaffairs/)]**
This course serves as the capstone course for the sport management program. This is a senior-level course focusing on evaluation of promotion and public relations within essential to sport management. Application of sport management theory and sport leadership will serve as the foundation of the capstone course. A case study approach is utilized to develop understanding of the practical challenges of creating viable promotional and public relation strategies within the sport industry.

**KINE 4398. Internship - Professional Development. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Supervised professional development activities focusing on the synthesis of the hard and soft skills acquired across the curriculum. There will be reflective writings that demonstrate growth relative to professional experiences, problem solving, and other discipline specific exercises to ensure professional readiness.

**KINE 4399. Internship - Field Experience. 3 Credit Hours (Lecture: 3 Hours, Lab: 0 Hours).**
Supervised field experience performed with selected agencies and organizations including but not limited to: rec sports, athletics, schools, parks and rec, YMCA/YWCA, Boys/Girls Clubs, Boy/Girl Scouts, rehabilitation centers, cardiac rehab, etc.

## Rehabilitation Science Courses