**KINESIOLOGY, BS**

**Program Description**

Students seeking a BS in Kinesiology can specialize in EC-12 Physical Education Certification, Exercise Science-Strength & Conditioning, or Pre-Allied Health. All majors must take a minimum of 42 SCH in University Core Courses and a minimum of 23 SCH in Kinesiology Major Requirements.

The Bachelor of Science Degree with a major in Kinesiology coursework includes:

1. General Education Core Requirements,
2. Kinesiology Major Requirements,
3. Special Emphasis Requirements, and

Beyond the General Education Core Requirements, students majoring in kinesiology must complete all courses in sections 2-4 above with a grade of “C” or better. Transfer credit hours into the kinesiology degree plans must adhere to the same grade standard.

**EC-12 Physical Education Certification**

Students seeking a certificate to teach EC-12 Physical Education must complete the Bachelor of Science Degree in Kinesiology and complete the College of Education and Human Development EC-12 Teacher Certification requirements. Information for students holding a degree and seeking certification may be obtained in the Certification Office.

**Exercise Science – Strength & Conditioning Specialization**

Students seeking a career in exercise science/strength and conditioning should complete the requirements for the Exercise Science – Strength & Conditioning Specialization of the kinesiology major. This specialization serves as an excellent program for students seeking careers as fitness trainers, exercise specialists, and strength and conditioning coaches.

The Exercise Science - Strength & Conditioning Specialization is also an exceptional preparatory program for students pursuing graduate study in Exercise Science (e.g. exercise physiology, kinesiology, biomechanics, measurement/evaluation). Graduates with a BS in Kinesiology with an Exercise Science – Strength & Conditioning Specialization will demonstrate knowledge of structural kinesiology, exercise physiology, biomechanics, sport psychology, and measurement and evaluation.

**Pre-Allied Health Professional Specialization**

Students seeking a career in allied health fields (e.g. Cardiac Rehabilitation, Dentistry, Medicine, Occupational Therapy, and Physical Therapy) should complete the requirements of the Pre-Allied Health Professional Specialization of the kinesiology major. This specialization serves as an excellent preparatory program for students pursuing graduate study in these fields as well as post baccalaureate study in exercise science. Graduates with a BS in Kinesiology with a Pre-Allied Health Professional Specialization will demonstrate knowledge of basic kinesiology theory and principles as they relate to the fields in allied health.

**Student Learning Outcomes**

**EC-12 Physical Education Certification**

Students will:

- create safe, equitable, developmentally-appropriate and enjoyable movement experiences which benefit the participant and encourage life-long participation in movement;
- model a healthy, physically active lifestyle and model a life-long learner seeking opportunities to grow professionally;
- serve the community as a knowledgeable practitioner of the kinesiology profession who meets the needs of all students in a diverse society.

**Exercise Science – Strength & Conditioning Specialization**

Students will:

- apply the principles of exercise testing and prescription to safely and effectively assess fitness status and appropriately prescribe exercise training programs;
- apply the principles of biomechanics to assess the quantity and quality of human motion;
- apply the principles of sport psychology to enhance human performance;
- apply the principles of measurement and evaluation to collect, analyze, and interpret data.

**Pre-Allied Health Professional Specialization**

Students will:

- apply the principles of exercise physiology to prescribe safe and effective strength and conditioning programs;
- apply the principles of biomechanics to assess the quantity and quality of human motion;
- apply the principles of sport psychology to enhance human performance;
- apply the principles of measurement and evaluation to collect, analyze, and interpret data.

**General Requirements**

<table>
<thead>
<tr>
<th>EC-12 Physical Education Certification</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>First-Year Seminars (when applicable)</td>
<td>0-2</td>
</tr>
<tr>
<td>Kinesiology Major Requirements</td>
<td>26</td>
</tr>
<tr>
<td>Certification Requirements</td>
<td>16</td>
</tr>
<tr>
<td>Physical Education Certification Special Emphasis</td>
<td>15</td>
</tr>
<tr>
<td>Physical Education Certification Special Foundations</td>
<td>27</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>126-128</td>
</tr>
</tbody>
</table>
Full-time, first time in college students are required to take the first-year seminars.

1. UNIV 1101 First-Year Seminar I (1 sch)
2. UNIV 1102 First-Year Seminar II (1 sch)

Transfer students with 24 or more hours are exempt from First-Year Seminar.

Exercise Science – Strength & Conditioning Specialization

<table>
<thead>
<tr>
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<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Curriculum Program</td>
<td>42</td>
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<tr>
<td>(<a href="http://catalog.tamucc.edu/undergraduate/university-college/programs/core-curriculum-program/">http://catalog.tamucc.edu/undergraduate/university-college/programs/core-curriculum-program/</a>)</td>
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<tr>
<td>Exercise Science Special Emphasis</td>
<td>28</td>
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<tr>
<td>Requirements</td>
<td>25</td>
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<td>Total Credit Hours</td>
<td>121-123</td>
</tr>
</tbody>
</table>

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   • UNIV 1101 First-Year Seminar I (1 sch)
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Pre-Allied Health Professional Specialization

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<tr>
<td>(<a href="http://catalog.tamucc.edu/undergraduate/university-college/programs/core-curriculum-program/">http://catalog.tamucc.edu/undergraduate/university-college/programs/core-curriculum-program/</a>)</td>
<td></td>
</tr>
<tr>
<td>First-Year Seminars (when applicable)</td>
<td>0-2</td>
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<tr>
<td>Kinesiology Major Requirements</td>
<td>26</td>
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<tr>
<td>Special Emphasis Requirements</td>
<td>30</td>
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<tr>
<td>Special Foundations</td>
<td>24</td>
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<tr>
<td>Total Credit Hours</td>
<td>122-124</td>
</tr>
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Program Requirements

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<tr>
<td>UNIV 1101</td>
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**EC-12 Physical Education Certification**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>KINE 1110</td>
<td>Individual/Dual/Lifetime Sports</td>
<td>1</td>
</tr>
<tr>
<td>KINE 2317</td>
<td>Re-inventing Games</td>
<td>3</td>
</tr>
<tr>
<td>KINE 2325</td>
<td>Physiological Aspects of Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINE 2375</td>
<td>Nutrition for Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>KINE 3339</td>
<td>Elementary Physical Education Programs</td>
<td>3</td>
</tr>
<tr>
<td>KINE 3341</td>
<td>Secondary Physical Education Programs</td>
<td>3</td>
</tr>
</tbody>
</table>

**Special Emphasis**

Select a minimum of 15 hours in a second emphasis area

Special Foundations
Select 27 semester hours 27

Total Hours 58

^ Blended offering

Special Emphasis
Students completing the EC-12 Physical Education Certification must complete five courses (a minimum of 15 semester hours) in a special emphasis area (second emphasis area) approved by their faculty mentor. Students must pass these courses with a grade of "C" or better. It is strongly recommended that students take at least one additional course beyond the required five in this discipline to better prepare for the TExES certification test taken after state issuance of initial teaching certificate in EC-12 Physical Education.

Special Foundations
(See "College of Education and Human Development Certification Requirements" in this catalog for the EDUC courses required for teacher certification). Prior to being admitted into the Field-based block course, students pursuing EC-12 Certification must complete KINE 3339 Elementary Physical Education Programs (3 sch) and KINE 3341 Secondary Physical Education Programs (3 sch). Students must have a minimum grade point average of 2.75 on all academic work taken in Kinesiology prior to being admitted into the Teacher Education Program.

Exercise Science – Strength & Conditioning
Specialization

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>KINE 1106</td>
<td>Weight Training</td>
<td>1</td>
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<tr>
<td>KINE 2326</td>
<td>Essentials of Professional Fitness Training</td>
<td>3</td>
</tr>
<tr>
<td>KINE 2375</td>
<td>Nutrition for Human Performance</td>
<td>3</td>
</tr>
<tr>
<td>KINE 3318</td>
<td>Prevention and Care of Athletic Injuries</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 3335</td>
<td>Legal Issues in Sport</td>
<td>3</td>
</tr>
<tr>
<td>KINE 4340</td>
<td>Exercise Testing and Prescription</td>
<td>3</td>
</tr>
<tr>
<td>KINE 4693</td>
<td>Professional Field Experience I</td>
<td>6</td>
</tr>
<tr>
<td>KINE 4694</td>
<td>Professional Field Experience II</td>
<td>6</td>
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Special Foundations^ 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>CHEM 1411</td>
<td>General Chemistry I</td>
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<tr>
<td>KINE 3320</td>
<td>Introduction to Therapeutic Interventions</td>
<td>3</td>
</tr>
<tr>
<td>KINE 4329</td>
<td>Essentials of Strength and Conditioning</td>
<td>3</td>
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<tr>
<td>SMGT 2314</td>
<td>Introduction to Sport Management</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 3330</td>
<td>Promotion of Sport</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 3366</td>
<td>Managing Sport and Leisure Services</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 4308</td>
<td>Sport Facilities and Event Management</td>
<td>3</td>
</tr>
<tr>
<td>SMGT 4309</td>
<td>Finance Management in Sport</td>
<td>3</td>
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</table>

Total Hours 53

^ Blended offering

To enroll in the Professional Field Experiences students must have departmental approval as well as an overall and Kinesiology GPA of 2.75.

Although a 2.75 GPA is the minimum standard for the Professional Field Experiences I and II, students should take note that most allied health graduate programs are extremely competitive. A 3.5 or higher GPA is mostly needed to position themselves for acceptance. This is especially true for Physical Therapy graduate programs that a 3.7 or higher GPA is essential.

2 Students must pass these courses with a grade of "C" or better.

^ Blended offering

Pre-Allied Health Professional Specialization

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</thead>
<tbody>
<tr>
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<td>Essentials of Professional Fitness Training</td>
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<td>Nutrition for Human Performance</td>
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</tr>
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<tr>
<td>SMGT 3335</td>
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Special Foundations
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Total Hours 54

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^ Blended offering

Courses

KINE 1101 Beginning Racquetball
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice in the skills, rules, and strategies of racquetball.

KINE 1102 Swimming
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice in the techniques, skills and safety practices for levels of swimming.

KINE 1103 Badminton
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of badminton skills, rules and strategy.

KINE 1104 Gymnastics
1 Semester Credit Hour (1 Lab Hour)
Skills, techniques, safety practices, rules and scoring criteria for gymnastics.

KINE 1105 Sailing
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice in skills and safety involved in sailing.

KINE 1106 Weight Training
1 Semester Credit Hour (1 Lab Hour)
The study and practice of physiological principles related to training programs for the development of muscular strength and endurance.

KINE 1107 Karate
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of contemporary techniques of karate.
KINE 1108 Strength Conditioning for Women
1 Semester Credit Hour (1 Lab Hour)
The study and practice of physiological principles relating to training programs for the development of muscular strength and endurance for women.

KINE 1109 Rhythmic Aerobics
1 Semester Credit Hour (1 Lab Hour)
A study of dance movement as it relates to physical fitness development.

KINE 1110 Individual/Dual/Lifetime Sports
1 Semester Credit Hour (1 Lab Hour)
Instruction, participation, and practice in a variety of individual, dual, and lifetime sports.

KINE 1111 Beginning Golf
1 Semester Credit Hour (1 Lab Hour)
The study of techniques and knowledge pertinent to the game of golf.

KINE 1112 Personal Self Defense
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of contemporary techniques of self protection.

KINE 1113 Tennis
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and strategy involved in tennis.

KINE 1114 Volleyball
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills and strategy involved in volleyball.

KINE 1115 Soccer
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and strategies involved in soccer.

KINE 1116 Ranger Leadership Laboratory
1 Semester Credit Hour (1 Lab Hour)
Practical leadership and teamwork training in rappelling, rope bridges, weapons firing, map reading and land navigation, water safety, patrolling, and other ranger skills. Includes a weekend field trip where the techniques learned will be applied in competitive events. Cross listed with MSC1 1172.

KINE 1117 Basketball
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and instructional strategies involved in basketball.

KINE 1118 Softball
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and instructional strategies involved in softball.

KINE 1119 Baseball
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and instructional strategies involved in baseball.

KINE 1120 Football
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and instructional strategies involved in football.

KINE 1121 Track and Field
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills, and instructional strategies involved in track and field.

KINE 1122 Non-traditional Team Sports
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of techniques, skills and instructional strategies involved in non-traditional team sports. Typical topics may include lacrosse, field/floor hockey, ultimate Frisbee, flickerball, cricket and team handball.

KINE 1123 Beginning Rock Climbing
1 Semester Credit Hour (1 Lab Hour)
The study and practice of the technical and educational skills necessary to safely conduct rock climbing and climbing associated activities.

KINE 1124 Beginning Jazz Dance
1 Semester Credit Hour (1 Lab Hour)
An examination of the basic steps (skills), movements, dance combinations and instructional practices that pertain to jazz dance. This course will also include multi-cultural application, history and choreography of jazz dance.

KINE 1130 Beginning Fencing
1 Semester Credit Hour (1 Lab Hour)
Instruction and practice of the skills, techniques, equipment and safety as it pertains to fencing.

KINE 1131 Yoga
1 Semester Credit Hour (1 Lecture Hour)
Instruction and practice of Yoga postures, breathing, meditation and relaxation.

KINE 1132 Fitness Walking
1 Semester Credit Hour (1 Lecture Hour)
Instruction and practice of fitness walking.

KINE 1133 Tai Chi
1 Semester Credit Hour (1 Lab Hour)

KINE 1134 Beginning Surfing
1 Semester Credit Hour (1 Lab Hour)
This course is designed to provide student with the skills and knowledge necessary to safely enjoy surfing activities. Through structured classroom lectures (including videos) and laboratory activities (beach program), the student will be introduced to the history of surfing, proper use of equipment, skill techniques of surfing, and environmental factors and issues specific to this sport.

KINE 1135 Army Physical Fitness Training
1 Semester Credit Hour (3 Lab Hours)
Instruction and practice of the skills, techniques and fitness activities that are germane to typical Army training.

KINE 1136 Pilates
1 Semester Credit Hour (3 Lab Hours)
Instruction and practice in the skills, techniques, and principles of Pilates with emphasis on the Classical Pilates matwork.

KINE 1151 Scuba and Snorkeling
1 Semester Credit Hour (1 Lab Hour)
Knowledge and techniques of snorkeling and scuba diving. Instruction will be directed toward obtaining a basic open water diver certification.

KINE 1222 Basic Equestrian Skills
2 Semester Credit Hours (2 Lab Hours)
Instruction and practice of skills and abilities involved in basic horsemanship and equitation.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>KINE 1320</td>
<td>Introduction to Athletic Training</td>
<td>3</td>
<td>3 Semester Credit Hours (3 Lecture Hours)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisite: KINE 3318. May be taken concurrently.</td>
</tr>
</tbody>
</table>
KINE 2225 Sports Conditioning
2 Semester Credit Hours (2 Lecture Hours)
This course addresses the principles and practice of sports conditioning from a coaching perspective. Topics will include athletic needs evaluation, exercise programming, and program implementation. Issues regarding resistance exercise, speed, endurance, explosiveness training, and agility will be addressed.

KINE 2227 Group Fitness Instructor Training Certification
2 Semester Credit Hours (2 Lecture Hours)
This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in group-fitness instruction. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the instructor-participant relationship, the principles of motivation to encourage adherence in the group fitness setting, effective instructor-to-participant communication techniques, methods for enhancing group leadership, and the group fitness instructor's professional role. A national group fitness instructor certification is offered at the end of the course.

KINE 2255 Water Safety Instruction
2 Semester Credit Hours (2 Lecture Hours)
Skills and techniques of aquatic rescues and swimming programs. May be repeated for credit by non-kinesiology majors. Materials fee required.

KINE 2313 Foundations of Kinesiology
3 Semester Credit Hours (3 Lecture Hours)
An overview of the field of physical education which includes the history, philosophy, principles, current concepts of physical education and career options. For kinesiology majors this course must be taken prior to any senior level (4000) kinesiology courses.
TCCNS: PHED 1301

KINE 2316 Health and Fitness
3 Semester Credit Hours (3 Lecture Hours)
An overview of relevant health and fitness topics including mental and physical health, nutrition, human sexuality, communicable and non-communicable diseases, use and abuse of drugs/alcohol and safety. This course will include

KINE 2317 Re-inventing Games
3 Semester Credit Hours (3 Lecture Hours)
This course is designed to introduce a framework for the development of games, sports, and activities through an inclusive and developmentally appropriate process of change, challenge, and choice. A wide array of sports, sports-related games and activities are introduced, deconstructed for their current exclusivity and then reconstructed through a framework which seeks to change the existing exclusivity of the rules, to challenge participating students of all cognitive and physical abilities, and then build in a choice component into the activity. This course is recommended prior to enrolling in KINE 3339 and KINE 3341.

KINE 2325 Physiological Aspects of Kinesiology
3 Semester Credit Hours (3 Lecture Hours)
An introduction to the fundamental principles of human physiology and their application to kinesiology.

KINE 2326 Essentials of Professional Fitness Training
3 Semester Credit Hours (3 Lecture Hours)
This course is designed to provide theoretical knowledge and practical 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.

KINE 2355 Lifeguard Training
3 Semester Credit Hours (3 Lecture Hours)
This course provides instruction in first aid, CPR for professional rescuers, Automated External Defibrillator (AED) training, water safety and rescue skills.

KINE 2357 Sport Officiating
3 Semester Credit Hours (3 Lecture Hours)
Designed to provide an understanding of the foundations of officiating for sport, and the effective organization, training, and supervision of officials for sport programs.

KINE 2375 Nutrition for Human Performance
3 Semester Credit Hours (3 Lecture Hours)
This course is an introduction to the physiological, anatomical, and psychological aspects of nutrition in relation to human performance and optimal health. Special emphasis is placed on sport and fitness enhancement and achievement of peak training levels, through proper nutrient ingestion.

KINE 3112 Physiology of Exercise Lab
1 Semester Credit Hour (1 Lecture Hour)
The required laboratory course with KINE 3312. Demonstration and hands-on learning will introduce students to the scientific basis, techniques, and methods used in exercise physiology. Lab activities will complement lecture materials from KINE 3312. KINE 3112 must be taken concurrently with KINE 3312.

KINE 3113 Advanced Tennis
1 Semester Credit Hour (1 Lab Hour)
Advanced tennis is designed to provide instruction and practice for students with a high level of tennis ability and experience.
Prerequisite: KINE 2113.

KINE 3214 Physical Education Activities
2 Semester Credit Hours (2 Lecture Hours)
Application of principles of physical activities, games and sports.

KINE 3244 Rhythmic and Dance Activities
2 Semester Credit Hours (2 Lecture Hours)
Instruction and practice in creative and structured dance as applied to elementary and secondary school programs.

KINE 3291 Clinical Experience in Athletic Training III
2 Semester Credit Hours
A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession.
Prerequisite: KINE 3320).
* May be taken concurrently.

KINE 3292 Clinical Experience in Athletic Training IV
2 Semester Credit Hours
A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession.
Prerequisite: KINE 3324.
* May be taken concurrently.

KINE 3301 Outdoor Adventure Programs
3 Semester Credit Hours (3 Lecture Hours)
An introduction to a variety of outdoor adventure activities and basic outdoor skills. In addition to skill acquisition and assessment, this course covers such topics as: history and philosophy of outdoor adventure programs, risk and legal liability and trip planning.
KINE 3312  Physiology of Exercise  
3 Semester Credit Hours (3 Lecture Hours)  
This course is an application of anatomy and physiology that allows for the understanding of the effects of various forms of exercise and the environment on the body systems and performance. Lab activities will complement lecture materials.  
Prerequisite: (KINE 2325 or BIOL 2401) and (KINE 1320 or 2313) and (KINE 3112)  
* May be taken concurrently.

KINE 3318  Prevention and Care of Athletic Injuries  
3 Semester Credit Hours (3 Lecture Hours)  
Provides the general knowledge and general application of theory, principles, and skills used in the prevention, care, and rehabilitation of athletic injuries.

KINE 3320  Introduction to Therapeutic Interventions  
3 Semester Credit Hours (3 Lecture Hours)  
Provides the student with the general knowledge of current theory and application of various therapeutic interventions used in the treatment of musculoskeletal injuries, including thermal therapy, cryotherapy, manual therapy, and therapeutic exercises.  
Prerequisite: KINE 3318.

KINE 3322  Evaluation of Upper Extremity Injuries  
3 Semester Credit Hours (3 Lecture Hours)  
Provides the student with general knowledge of evaluation techniques of athletic injuries to the upper extremities including range of motion testing, neurologic, and orthopedic evaluations.  
Prerequisite: KINE 2325, 3318 or BIOL 2401.

KINE 3324  Evaluation of Lower Extremity Injuries  
3 Semester Credit Hours (3 Lecture Hours)  
Provides the student with general knowledge of evaluation techniques of athletic injuries to the lower extremities including range of motion testing, neurologic, and orthopedic evaluations.  
Prerequisite: KINE 2325, 3318 or BIOL 2401.

KINE 3337  Sport and Exercise Psychology  
3 Semester Credit Hours (3 Lecture Hours)  
This course provides general knowledge of the psychological factors that are associated with participation and performance in sport, exercise, and other types of physical activity with emphasis on motivational techniques, personality dynamics, and mental health serving as focal points.

KINE 3338  Motor Development/Motor Learning  
3 Semester Credit Hours (3 Lecture Hours)  
A study of the fundamental principles related to human motor development and the scientific principles related to motor learning.

KINE 3339  Elementary Physical Education Programs  
3 Semester Credit Hours (3 Lecture Hours)  
The application of the fundamental principles related to human motor development, physical fitness, locomotor skills, non-locomotor skills, manipulative skills, and rhythmic activities with children at the elementary school level. Recommended  
Prerequisite: KINE 2317 and 3338.

KINE 3341  Secondary Physical Education Programs  
3 Semester Credit Hours (3 Lecture Hours)  
The application of the fundamental principles related to human motor development, physical fitness, sports related activities and dance with children at the secondary school level. Recommended  
Prerequisite: KINE 3338 and 3339.

KINE 4127  Biomechanics Lab  
1 Semester Credit Hour (1 Lab Hour)  
The required laboratory course with KINE 4327. The demonstration and application of mechanical factors and principles affecting human motion. Qualitative and quantitative analysis of human motion with emphasis on sport and fitness activities. KINE 4127 must be taken concurrently with KINE 4327.  
Prerequisite: KINE 4327  
* May be taken concurrently.

KINE 4291  Clinical Experience in Athletic Training V  
2 Semester Credit Hours  
A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession.  
Prerequisite: KINE 3322  
* May be taken concurrently.

KINE 4292  Clinical Experience in Athletic Training VI  
2 Semester Credit Hours  
A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession.  
Prerequisite: KINE 4322  
* May be taken concurrently.

KINE 4293  Clinical Experience in Athletic Training VII  
2 Semester Credit Hours (2 Lecture Hours)  
A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession.  
Prerequisite: KINE 4326  
* May be taken concurrently.

KINE 4294  Clinical Experience in Athletic Training VIII  
2 Semester Credit Hours  
A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession.  
Prerequisite: KINE 4324  
* May be taken concurrently.

KINE 4310  Programs in Sports and Physical Fitness  
3 Semester Credit Hours (3 Lecture Hours)  
A study of the principles of physical fitness and biomechanics of sports with an emphasis upon student performance in a variety of sport activities.  
Prerequisite: KINE 2313.

KINE 4311  Measurement and Evaluation  
3 Semester Credit Hours (3 Lecture Hours)  
Use and function of the various tests used in kinesiology together with the purpose, scope and techniques of test construction. Development of statistical techniques necessary for manipulation and interpretation of physical performance data.  
Prerequisite: KINE 1320 or 2313.

KINE 4322  Rehabilitation of Athletic Injuries  
3 Semester Credit Hours (3 Lecture Hours)  
Rehabilitation for athletic injuries including goniometry, muscle testing, therapeutic exercises, and the use of SOAP notes.  
Prerequisite: KINE 2325, 3318 or BIOL 2401.
KINE 4324  Administration of Athletic Training  
3 Semester Credit Hours (3 Lecture Hours)  
Provides the general knowledge and application of athletic training administration including facility design, insurance claims, liability issues, and injury and treatment records.

KINE 4325  Kinetic Anatomy  
3 Semester Credit Hours (3 Lecture Hours)  
An analysis of the skeletal, muscular, and neurological structure and functional aspects of human movement with emphasis on sport and fitness activities.  
**Prerequisite:** KINE 2325 or BIOL 2401 and KINE 1320 or 2313.

KINE 4326  Medical Terminology and Conditions in Sport and Exercise  
3 Semester Credit Hours (3 Lecture Hours)  
Provides information about team physician and athletic trainer relationships, physical examinations, emergency equipment, medical terminology, athletic injuries, and problems related to the team physician.  
**Prerequisite:** KINE 2325, 3318 or BIOL 2401.

KINE 4327  Biomechanics  
3 Semester Credit Hours (3 Lecture Hours)  
An analysis of the mechanical factors and principles influencing human motion with emphasis on sport and fitness activities. Recommended  
**Prerequisite:** (KINE 2325 or BIOL 2401) and (KINE 1320 or 2313) and KINE 4127*.

*May be taken concurrently.

KINE 4328  Sport and Exercise Pharmacology  
3 Semester Credit Hours (3 Lecture Hours)  
Provides general knowledge of the classifications, legal concerns, therapeutic uses, actions, side effects, and adverse reactions of major drug groups related to sports activities.  
**Prerequisite:** KINE 2325, 3318 or BIOL 2401.

KINE 4329  Essentials of Strength and Conditioning  
3 Semester Credit Hours (3 Lecture Hours)  
This course is designed to provide a comprehensive overview of strength and conditioning. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and nutrition, exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for either the nationally accredited Certified Strength and Conditioning Specialist (CSCS) or the NSCA Certified Personal Trainer (CPT) exams.  
**Prerequisite:** (BIOL 2401, 2402, KINE 4312 and 4327).

KINE 4339  Special Populations in Kinesiology  
3 Semester Credit Hours (3 Lecture Hours)  
A course designed to direct kinesiology educators toward meeting the program needs of the exceptional individual in physical education or kinesiology professional setting. Practical teaching application with exceptional individuals is stressed.  
**Prerequisite:** KINE 2313.

KINE 4340  Exercise Testing and Prescription  
3 Semester Credit Hours (3 Lecture Hours)  
This course provides classroom and hands on experience addressing all facets of exercise testing and prescription ranging from health appraisal, physical fitness testing, principles of exercise prescription, clinical exercise physiology, and special populations.

KINE 4363  Sport Programming  
3 Semester Credit Hours (3 Lecture Hours)  
Designed to provide initial foundation of basic sport programming skills, methods, and techniques necessary to deliver sports activities within a variety of settings, agencies and/or organizations. Recommended