KINESIOLOGY

College of Health and Human Services

Program Description

Kinesiology is an academic area of study concerned with the art and science of human movement. The Department offers a Bachelor of Science degree with two concentrations of study in Physical Education and Exercise Science, a stand alone Bachelor of Science in Athletic Training, a Master of Science with two concentrations of study (Exercise Science and Movement Studies), and a Personal Trainer/Strength and Conditioning Certificate. Two Minor programs (Coaching and Supplementary Authorization in Physical Education) are also available.

Concentrations

- **Physical Education**: The physical education concentration is a CCTC accredited program designed with two options: the first option, Physical Education Teach Education (PETE), prepares students for a teaching career in physical education. The second option, Physical Activity Conditioning and Coaching (PACC) prepares students for a career in a variety of movement settings other than the traditional physical education teaching career.

- **Exercise Science**: This concentration has two options:
  1. Health Fitness/Strength Conditioning and
  2. Clinical Exercise & Rehabilitation.

The Health Fitness/Strength Conditioning option is a National Strength Conditioning Association (NSCA) recognized program that prepares students for graduate work in the areas of exercise and sport science, as well as for careers as a strength and conditioning specialist in corporate and community wellness, college/professional-based athletics, commercial fitness & health club settings. The Clinical Exercise & Rehabilitation option provides students with in-depth science-based coursework which meets the prerequisite requirements for most physical therapy, occupational therapy, and other health related professional programs. Career options include cardiac rehabilitation, clinical exercise specialist, and other clinical/technical specialties in allied health fields.

- **Athletic Training**: This bachelors degree program is presently accredited by the Commission on the Accreditation of Athletic Training Education Programs (CAATE). Completion of the Athletic Training Education Program prepares students for careers in athletic training, sports medicine, and other paramedical areas. Upon completion of the degree, students are qualified to take the national certification exam to become a National Athletic Trainers Association Board of Certification (BOC) Certified Athletic Trainer. Students are also encouraged to pursue a teaching credential.

Special Features

- The Kinesiology facilities include state of the art high tech laboratories for motor learning, biomechanics, exercise physiology, sport performance, physical therapy/therapeutic exercise and rehabilitation, and athletic training.

- Several activity spaces are available, including dance, weight training, and gymnastics rooms. Outside facilities include a lap pool, racquetball and tennis courts, jogging trails, sports fields, putting green, driving range, and aquatic center.

- Kinesiology majors at Sacramento State have opportunities for unique experiences at the undergraduate level. In the Physical Education Concentration, students observe and teach children in both on and off campus field sites. Students concentrating in the Athletic Training area serve internships under BOC certified athletic trainers in the community colleges and on the campus with Division I athletes.

- Sacramento State has an accredited CAATE undergraduate Athletic Training Program and a CCTC Accredited Physical Education Teacher Education program.

- Exercise Science students gain useful experience through their internships at various on and off campus locations.

- Students interested in Physical Therapy build a valuable background of experience in community hospitals and rehabilitation centers.

- At the graduate level, students engage in a variety of research projects, both on and off campus in the areas of Exercise Science and Movement Studies.

Note: Students interested in majoring or minoring in Kinesiology are encouraged to go to the Department of Kinesiology and Health Science Office for an assignment to a faculty advisor.

Career Possibilities

- Athletic Trainer · Biomechanist · Cardiac Catheterization Technician
- Cardiac Electrophysiologist · Cardiac Rehabilitation Specialist · Cardiac Technician · Cardiovascular Sonography Technician · Clinical Exercise Physiologist · Coach · Community Center Leader · Corporate Wellness/Fitness · Corrective Therapist · Doctor of Osteopathy School · Echocardiagram Technician · Endurance Sport Coach · Exercise Physiologist · Exercise Scientist · Health Fitness Specialist · Intramural Recreational Sports Specialist · Medical School · Nursing School · Occupational Therapist School · Personnel Fitness Trainer · Pharmacy Sale Representative · Physician Assistant · Physical Therapy Aide · Physical Therapist · Physical Education Teacher · Recreation Sports Coordinator · Sportscaster · Strength Conditioning Specialist · University Student Fitness/Wellness Coordinator

Contact Information

Katherine Jamieson, Chair
Stacie Tillman, Administrative Coordinator
Solano Hall 3002
(916) 278-6441
www.csus.edu/HHS/KHS (http://www.csus.edu/HHS/KHS)

BOSCOLO, MARCO
IMAMURA, RODNEY
KUEHL-KITCHEN, JULIE
PARKER, DARYL
QUINTANA, ROBERTO
SMITH, MAUREEN
TACLA, CRAIG
THEODORIDES, HARRY
VALDEZ, LINDY
WRIGHT, MICHAEL
Undergraduate Programs

BS Degree in Physical Education Concentration

Units required for Major: 57 units all of which must be completed with a grade of "C" or better. Minimum total units for the BS: 120

Note: Additional units may be required to meet the Sacramento State foreign language requirement.

The physical education concentration is designed with two options: the first option, Physical Education Teacher Education (PETE), prepares students for a teaching career in physical education. The student who completes the program in physical education will have the breadth and depth of knowledge regarding developmentally appropriate physical education. The PETE option provides students with the coursework for both subject matter content and pedagogy for teaching physical education at the K-12 level. Students who choose this option will then have the opportunity to attain their Single Subject Physical Education California Teaching Credential, an additional two semester program through the Department of Teacher Education at Sacramento State.

The second option, Physical Activity Conditioning and Coaching (PACC) prepares students for a career in a variety of movement settings, other than the traditional physical education teaching career. These movement settings include club and high school athletics, intercollegiate athletics, and professional athletics, in the fields of coaching, conditioning, and administration. The PACC option does not meet the standards for subject matter preparation and the PACC student would need to complete additional coursework to qualify for admission to pursue the Physical Education Teaching Credential at Sacramento State and other institutions.

The student who completes the PETE or PACC option will understand the aesthetics of movement and human performance and the meaningfulness of physical activity in lifelong learning. Additionally, the student will gain knowledge of the historical and philosophical factors that relate to performance, fitness and wellness.

Required Core (13 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 25</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>KINS 150</td>
<td>Exercise and Sport Physiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 151D</td>
<td>Applied Kinesiology and Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>KINS 176</td>
<td>Perceptual Motor Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Upper Division Courses (18 Units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 133</td>
<td>Integration of Concepts</td>
<td>3</td>
</tr>
<tr>
<td>KINS 134</td>
<td>History and Philosophy of Physical Education and Sport</td>
<td>3</td>
</tr>
<tr>
<td>KINS 135</td>
<td>Assessment Strategies in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>KINS 137</td>
<td>Sociology Of Sport</td>
<td>3</td>
</tr>
<tr>
<td>KINS 138</td>
<td>Teaching Strategies in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>KINS 160</td>
<td>Sport and Exercise Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Physical Education Concentration Options (26 Units)

Select an option for the physical education concentration: 26

<table>
<thead>
<tr>
<th>Option</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Education Teacher Education (PETE) Option</td>
<td></td>
</tr>
<tr>
<td>Physical Activity, Conditioning and Coaching (PACC) Option</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 57

Physical Education Teacher Education (PETE) Option

Units required for option: 26 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 130</td>
<td>Elementary Physical Education Curriculum and Content</td>
<td>3</td>
</tr>
<tr>
<td>KINS 131</td>
<td>Secondary Physical Education Curriculum</td>
<td>2</td>
</tr>
<tr>
<td>KINS 141</td>
<td>PRO ACT I - Dual Sports</td>
<td>3</td>
</tr>
<tr>
<td>KINS 142</td>
<td>Professional Activities II - Creative Movement and Dance</td>
<td>3</td>
</tr>
<tr>
<td>KINS 145</td>
<td>Pro Act III - Team Sports</td>
<td>3</td>
</tr>
<tr>
<td>KINS 146</td>
<td>PRO ACT IV Individual Sports</td>
<td>3</td>
</tr>
<tr>
<td>KINS 148</td>
<td>ProAct V - Nontraditional Games and Sports</td>
<td>3</td>
</tr>
<tr>
<td>KINS 149</td>
<td>Professional Activities of Health and Skill Related Fitness</td>
<td>3</td>
</tr>
<tr>
<td>KINS 177</td>
<td>Introduction to Adapted Physical Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 26

Physical Activity, Conditioning and Coaching (PACC) Option

Units required for option: 26 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINS 99</td>
<td>Exercise for Healthy Living</td>
<td>2</td>
</tr>
<tr>
<td>KINS 120</td>
<td>Strength and Conditioning</td>
<td>3</td>
</tr>
<tr>
<td>KINS 121</td>
<td>Peak Performance Through Psychological Skills</td>
<td>3</td>
</tr>
<tr>
<td>KINS 132</td>
<td>Planning, Designing and Managing a Fitness Center</td>
<td>3</td>
</tr>
<tr>
<td>KINS 156</td>
<td>Care Of Athletic Injuries</td>
<td>3</td>
</tr>
<tr>
<td>KINS 161</td>
<td>Theory of Sport and Fitness Management</td>
<td>3</td>
</tr>
<tr>
<td>KINS 165</td>
<td>Theory of Coaching</td>
<td>3</td>
</tr>
<tr>
<td>KINS 166</td>
<td>Ethics, Inclusion and Equity in Coaching</td>
<td>3</td>
</tr>
<tr>
<td>KINS 194D</td>
<td>Assigned Field Experience in Coaching 1</td>
<td>1 - 2</td>
</tr>
</tbody>
</table>

Total Units 26

1 Students must repeat this course for a total of 3 units.

Requirements for a Single Subject Teaching Credential in Physical Education K-12

Blended Credential Option students must formally apply to the Teacher Preparation Program for acceptance into the credential option. A separate application and requirements are required for admission to the student teaching phase. Consult a Physical Education Concentration Advisor for details.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTE 471A</td>
<td>Elementary Physical Education Student Teaching</td>
<td>5</td>
</tr>
<tr>
<td>EDTE 471B</td>
<td>Secondary Physical Education Student Teaching</td>
<td>4</td>
</tr>
<tr>
<td>KINS 198A</td>
<td>Seminar in Physical Education - Elementary</td>
<td>2</td>
</tr>
<tr>
<td>KINS 198B</td>
<td>Seminar in Physical Education - Secondary</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units 12

Note: The following must be attained before student teaching can begin:

- Standard First Aid Certification;
- Current CPR Certification; and
• Receive **passing scores** on the California Basic Educational Skills Test (CBEST).

**Exercise Science Concentration - Pre-Major Requirements**

Freshman or transfer students interested in the BS Exercise Science Concentration Kinesiology Major are admitted as Pre-Exercise Science Concentration Kinesiology Major students.

To change to a BS Exercise Science Concentration Kinesiology major, Pre-major students are required to complete the following grade and course requirements and submit a Declaration of Major/Concentration to the Kinesiology Department Office along with transcript copies.

1. An overall GPA of 2.0.
2. Completion of the **Pre-Major required courses** with a "C-" or better. Only first and second attempts will be considered.

**BS Degree in Exercise Science Concentration**

Units required for: 60
Units required for Health Fitness/Strength Conditioning Specialist Option: 60
Units required for Clinical Exercise & Rehabilitation Specialist Option: 60

Minimum total units for the BS: 120

**Note:** Students graduating with a **BS in Kinesiology—Exercise Science Concentration** will not be subject to the University's Foreign Language Graduation Requirement. Students who change major may be subject to the University's Foreign Language Graduation Requirement.

All courses counted for the Exercise Science Concentration must be completed with a "C-" or better.

**Pre-Major Required Courses (17 Units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 10</td>
<td>Basic Biological Concepts</td>
<td>3</td>
</tr>
<tr>
<td>BIO 22</td>
<td>Introductory Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1A</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 6A</td>
<td>Introduction to General Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 1B</td>
<td>General Chemistry II</td>
<td>5</td>
</tr>
<tr>
<td>or CHEM 6B</td>
<td>Introduction to Organic and Biological Chemistry</td>
<td></td>
</tr>
</tbody>
</table>

**Required Upper Division (30 Units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 131</td>
<td>Systemic Physiology</td>
<td>4</td>
</tr>
<tr>
<td>KINS 151</td>
<td>Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>KINS 151A</td>
<td>Biomechanics</td>
<td>3</td>
</tr>
<tr>
<td>KINS 152</td>
<td>Physiology Of Exercise</td>
<td>3</td>
</tr>
<tr>
<td>KINS 152A</td>
<td>Fundamentals of Exercise Programs</td>
<td>3</td>
</tr>
<tr>
<td>KINS 152S</td>
<td>Energy Production Sports Performance</td>
<td>3</td>
</tr>
<tr>
<td>KINS 144</td>
<td>Analysis of Weight Training Muscular Fitness</td>
<td>2</td>
</tr>
<tr>
<td>KINS 153</td>
<td>Cardiovascular Testing and Exercise Prescription</td>
<td>3</td>
</tr>
<tr>
<td>KINS 156</td>
<td>Care Of Athletic Injuries</td>
<td>3</td>
</tr>
<tr>
<td>KINS 158</td>
<td>Motor Learning</td>
<td>3</td>
</tr>
</tbody>
</table>

**Specialist Options (13 Units)**

Select one of the following specialist options: 13

- Health Fitness/Strength Conditioning Specialist Option
- Clinical Exercise & Rehabilitation Specialist Option

**Health Fitness/Strength Conditioning Specialist Option**

In prior consultation with an exercise science advisor, a minimal of 13 units from the recommended list of courses below are required in addition to the core courses above:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 10</td>
<td>Nutrition And Wellness</td>
<td></td>
</tr>
<tr>
<td>FACS 113</td>
<td>Nutrition And Metabolism</td>
<td></td>
</tr>
<tr>
<td>KINS 120</td>
<td>Strength and Conditioning</td>
<td></td>
</tr>
<tr>
<td>KINS 122B</td>
<td>Cardiopulmonary Resuscitation</td>
<td></td>
</tr>
<tr>
<td>KINS 132</td>
<td>Planning, Designing and Managing a Fitness Center</td>
<td></td>
</tr>
<tr>
<td>KINS 136</td>
<td>Sport And Aging</td>
<td></td>
</tr>
<tr>
<td>KINS 151B</td>
<td>Biomechanics II</td>
<td></td>
</tr>
<tr>
<td>KINS 152B</td>
<td>Exercise Physiology of Women</td>
<td></td>
</tr>
<tr>
<td>KINS 152C</td>
<td>Prolonged Exercise</td>
<td></td>
</tr>
<tr>
<td>KINS 152D</td>
<td>Blood Lactate and Exercise</td>
<td></td>
</tr>
<tr>
<td>KINS 160</td>
<td>Sport and Exercise Psychology</td>
<td></td>
</tr>
<tr>
<td>PHYS 5A</td>
<td>General Physics: Mechanics, Heat, Sound</td>
<td></td>
</tr>
<tr>
<td>STAT 1</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Exercise & Rehabilitation Specialist Option**

In prior consultation with an exercise science advisor, a minimal of 13 units from the recommended list of courses below are required in addition to the core courses above.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 39</td>
<td>Microbiology for Allied Health Students</td>
<td></td>
</tr>
<tr>
<td>BIO 106</td>
<td>Genetics: From Mendel to Molecules</td>
<td></td>
</tr>
<tr>
<td>BIO 122</td>
<td>Advanced Human Anatomy</td>
<td></td>
</tr>
<tr>
<td>BIO 123</td>
<td>Neuroanatomy</td>
<td></td>
</tr>
<tr>
<td>BIO 130</td>
<td>Histology</td>
<td></td>
</tr>
<tr>
<td>BIO 132</td>
<td>Neurophysiology</td>
<td></td>
</tr>
<tr>
<td>BIO 133</td>
<td>Cardiovascular, Respiratory and Renal Physiology</td>
<td></td>
</tr>
<tr>
<td>CHEM 20</td>
<td>Organic Chemistry Lecture—Brief Course</td>
<td></td>
</tr>
<tr>
<td>CHEM 161</td>
<td>General Biochemistry</td>
<td></td>
</tr>
<tr>
<td>FACS 10</td>
<td>Nutrition And Wellness</td>
<td></td>
</tr>
<tr>
<td>FACS 113</td>
<td>Nutrition And Metabolism</td>
<td></td>
</tr>
<tr>
<td>KINS 122B</td>
<td>Cardiopulmonary Resuscitation</td>
<td></td>
</tr>
<tr>
<td>KINS 151B</td>
<td>Biomechanics II</td>
<td></td>
</tr>
<tr>
<td>KINS 153C</td>
<td>Cardiac Rehabilitation Exercise Electrocardiography</td>
<td></td>
</tr>
<tr>
<td>KINS 154A</td>
<td>Principles and Techniques in a Clinical Setting</td>
<td></td>
</tr>
<tr>
<td>NURS 14</td>
<td>Pharmacology</td>
<td></td>
</tr>
<tr>
<td>PT 130</td>
<td>Pathophysiology</td>
<td></td>
</tr>
<tr>
<td>PHYS 5A</td>
<td>General Physics: Mechanics, Heat, Sound</td>
<td></td>
</tr>
<tr>
<td>PHYS 5B</td>
<td>General Physics: Light, Electricity and Magnetism, Modern Physics</td>
<td></td>
</tr>
<tr>
<td>PSYC 150</td>
<td>Psychological Aspects of Aging</td>
<td></td>
</tr>
<tr>
<td>or PSYC 168</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>STAT 1</td>
<td>Introduction to Statistics</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td>Total Units</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>

**Admissions Requirements for the BS Degree in Athletic Training**

Students must formally apply for admission into the clinical program (4 semester practicum). Minimum criteria for admission includes:

- 2.8 GPA
- 150 hours of supervised and documented observation
- Completion of the following courses with a passing grade of "B" or better: BIO 25, BIO 26, KINS 154A and KINS 156
- Student information sheet
- Typed statement on goals
- Current first aid
- AED and CPR certification
- Two letters of recommendation
- A physical exam with medical history
- Hepatitis B immunization
- Technical standards form
- Proof of liability insurance
- Only first or second attempt will be considered for BIO 22, KINS 154A, KINS 156, or equivalent

For an admissions packet and current information, please see the Program Director and check the website at http://www.csus.edu/HHS/KHS/KINS/ATP/index.html. Transfer students may qualify for special advance placement during the admission process, please see the Athletic Training Education Program website above for more information.

**BS Degree in Athletic Training**

Units required for Major: 58-60

Minimum total units for the BS: 120

**Note:** Students graduating with a BS in Athletic Training will not be subject to the University’s Foreign Language Graduation Requirement. Students who change major may be subject to the University’s Foreign Language Graduation Requirement.

**Required Core (14 Units)**

- BIO 25 Human Anatomy and Physiology I 4
- BIO 26 Human Anatomy and Physiology II 4
- KINS 150 Exercise and Sport Physiology 3
- KINS 151D Applied Kinesiology and Biomechanics 3

**Required Lower Division Courses (5 Units)**

- FACS 10 Nutrition And Wellness 3
- NURS 14 Pharmacology 2

**Required Upper Division Courses (39-41 Units)**

- KINS 154A Principles and Techniques in a Clinical Setting 3
- KINS 154B Management and Health Care Administration in Athletic Training 3
- KINS 154C Therapeutic Modalities Laboratory 1
- KINS 155A Clinical Evaluation of the Upper Extremity 2
- KINS 155B Clinical Evaluation of the Lower Extremity 2
- KINS 156 Care Of Athletic Injuries 3
- KINS 156A Emergency Response 2
- KINS 157 Therapeutic Exercise 3
- KINS 160 Sport and Exercise Psychology 3

**KINS 194H Assigned Field Experience in Athletic Training** 1 - 3

- KINS 195D Practicum in Athletic Training (Phase II) 4
- KINS 195D Practicum in Athletic Training (Phase III) 4
- KINS 195D Practicum in Athletic Training (Phase IV) 4
- KINS 195D Practicum in Athletic Training (Phase V) 4

Total Units 58-60

**Note:** All above courses are required to meet CAATE accreditation. (See Program Director for all requirements.)

**Minor - Coaching**

Units required for Minor: 19-20

- KINS 150 Exercise and Sport Physiology 3
- KINS 156 Care Of Athletic Injuries 3

Select one of the following: 3

- KINS 110 Women and Sport
- KINS 137 Sociology Of Sport
- KINS 160 Sport and Exercise Psychology

**ATIC Coaching Series Courses** 4

- KINS Analysis Series Courses 2 - 3

Select 4 units from the following: 4

- KINS 156A Emergency Response
- KINS 194D Assigned Field Experience in Coaching

Total Units 19-20

**Note:** Substitutions can be made with permission of Department Chair.

**Minor - Supplementary Authorization In Physical Education**

Units required for Minor: 18

This minor will fulfill the California Commission on Teacher Credentialing requirements for a supplementary authorization to teach Introductory Physical Education, K-9. A grade of "C" or better is required in every course used to meet this requirement.

- KINS 138 Teaching Strategies in Physical Education 3
- KINS 142 Professional Activities II - Creative Movement and Dance 3
- KINS 172 Movement Education 3

Select one of the following: 3

- KINS 145 Pro Act III - Team Sports
- KINS 150 Exercise and Sport Physiology
- KINS 176 Perceptual Motor Development
- KINS 177 Introduction to Adapted Physical Education

Select two of the following: 5 - 6

- KINS 141 PRO ACT I - Dual Sports
- KINS 144 Analysis of Weight Training Muscular Fitness
- KINS 146 PRO ACT IV Individual Sports
- KINS 148 ProAct V - Nontraditional Games and Sports
Certificate - Personal Trainer/Strength And Conditioning

Units required for Certificate: 28

The program includes a minimum of 28 units of specified coursework. All courses listed must be completed with a "C" or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACS 113</td>
<td>Nutrition And Metabolism</td>
</tr>
<tr>
<td>KINS 120</td>
<td>Strength and Conditioning</td>
</tr>
<tr>
<td>KINS 132</td>
<td>Planning, Designing and Managing a Fitness Center</td>
</tr>
<tr>
<td>KINS 137</td>
<td>Sociology Of Sport</td>
</tr>
<tr>
<td>or KINS 160</td>
<td>Sport and Exercise Psychology</td>
</tr>
<tr>
<td>KINS 144</td>
<td>Analysis of Weight Training Muscular Fitness</td>
</tr>
<tr>
<td>KINS 151</td>
<td>Kinesiology</td>
</tr>
<tr>
<td>KINS 152</td>
<td>Physiology Of Exercise</td>
</tr>
<tr>
<td>KINS 153</td>
<td>Cardiovascular Testing and Exercise Prescription</td>
</tr>
<tr>
<td>KINS 156</td>
<td>Care Of Athletic Injuries</td>
</tr>
<tr>
<td>KINS 194A</td>
<td>Assigned Field Experience in Kinesiology</td>
</tr>
<tr>
<td>or KINS 195A</td>
<td>Directed Field Experience in Kinesiology</td>
</tr>
</tbody>
</table>

Total Units 28

Graduate Program

The graduate program leading to the Master of Science degree in Kinesiology is designed to expand the students’ knowledge and to augment their qualifications for leadership in their chosen profession.

The objectives of the program are to increase the students’ breadth and depth of knowledge relative to the discipline of Kinesiology; to provide the opportunity for students to engage in scholarly activity that includes creative and analytical thinking, interpreting, evaluating and reporting published research, designing and conducting research; and to provide a focus of study that will enhance career commitment and allow for experiences that will lead to continued self development and growth.

Admission Requirements

For students with an undergraduate major in Kinesiology, admission to the MS program as a classified graduate student requires:

- an overall GPA of 2.8 or 3.0 in the last 60 semester units; and
- upper division statistic course (e.g., EDS 140 or equivalent).

Students who have deficiencies in admission requirements which can be removed by specific additional preparation may be admitted to unclassified or conditionally classified graduate status for the purpose of removing deficiencies. Coursework taken to qualify for classified graduate status is in addition to and not counted toward the master’s program. While completing admission deficiencies, students may, if they possess the necessary prerequisites, enroll also in degree coursework, but no more than 6 units as an unclassified student or 12 units as a conditionally classified student can be applied toward the MS degree. Students must remove all admission deficiencies before being considered for classified status.

Students with deficiencies in admission requirements are requested to submit additional documentation in support of their application. These materials may include:

- GRE or GMAT scores;
- a letter stating reasons for pursuing graduate study in Kinesiology;
• a copy of recent research paper and/or a creative project; and
• letters of recommendation that speak specifically to academic ability.

Students applying for admission to the Kinesiology graduate program who do not have a degree in Kinesiology, are required to take a minimum of 20 specified units in Kinesiology. These students should see the graduate coordinator or a graduate advisor for details.

Admission Procedures
Applications are accepted as long as room for new students exists. All prospective graduate students, including Sacramento State graduates, must file the following with the Office of Graduate Studies, River Front Center, Room 215 (916) 278-6470:
• an online application for admission;
• two sets of official transcripts from all colleges and universities attended, other than Sacramento State; and
• two letters of recommendation.

For more admissions information and application deadlines please visit http://www.csus.edu/gradstudies/.

Approximately six weeks after receipt of all items listed above, a decision regarding admission will be mailed to the applicant. Upon admission, the student will select a graduate advisor.

Advancement to Candidacy
Each student must file an application for Advancement to Candidacy indicating a proposed program of graduate study. The procedure may begin as soon as the classified graduate student has:
• removed any deficiencies in admission requirements;
• completed at least 12 units of 200-level courses with a minimum 3.0 GPA; and
• taken the Writing Placement for Graduate Students (WPG) or taken a Graduate Writing Intensive (GWI) course in their discipline within the first two semesters of coursework at California State University, Sacramento or secured approval for a WPG waiver.

This application must be filed no later than the semester prior to enrolling in KINS 211. Advancement to Candidacy forms are available in the Office of Graduate Studies. See the Department’s graduate coordinator for more information about this process.

MS Degree in Kinesiology
Units required for the MS: 30, including 19 units for concentrations (see below).

Note: An 11-unit core of courses is required of all students; seven units of required courses and four units that are earned through the completion of a thesis or project. The thesis or project is required of all candidates for the Master of Science in Kinesiology. The courses in the core are designed to focus on an advanced study of the knowledge which is of common interest and concern to all graduate students pursuing a degree in Kinesiology. Within the remaining 19 units, the student is focused in an area of special interest by selecting a concentration: Exercise Science or Movement Studies. Each concentration includes a set of required courses and a specified number of elective units.

Six semester units of graduate work taken at other accredited institutions may be approved by the Graduate Coordinator or the student’s graduate advisor. Prerequisite units, units taken for undergraduate majors/minors, and units taken to qualify for fully classified graduate status, will not be counted for graduate credit. Only rarely are undergraduate Kinesiology courses approved for graduate credit. A maximum of six elective units may be taken in upper division undergraduate courses with advisor approval. A maximum of four units of graduate Practicum or Directed Individual Study may be taken for degree credit with advisor approval.

Required Courses (7 Units)
KINS 209 Graduate Studies in Kinesiology 3
KINS 210 Research Methods in Kinesiology 3
KINS 211 Research Seminar 1

Culminating Requirement (4 Units)
KINS 500 Culminating Experience 1 4

Concentrations (19 Units)
Select one of the following concentrations: 19

Exercise Science Concentration
Movement Studies Concentration
Movement Studies/Strength Condition Option
Movement Studies/Sports Psychology Option
Movement Studies/Sport Pedagogy Option

Total Units 30

1 The first time the student registers for KINS 500, he/she must also register for KINS 211. During this semester, the student develops his/her proposal with assistance from others in the seminar, the seminar professor and the student’s committee. When the proposal is completed, formal written and oral presentations are made to the seminar with the student’s committee in attendance. If the student does not complete the proposal and have it approved, he/she must enroll and attend KINS 211 another semester.

Exercise Science Concentration
KINS 250 Advanced Exercise Physiology Laboratory 3
KINS 252 Advanced Exercise Physiology 3
KINS 254 Advanced Biomechanics 3
KINS 259 Research in Exercise Physiology 3

Select 7 units of electives in consultation with an advisor 7

Total Units 19

Movement Studies Concentration
Select three of the following: 9
KINS 203 Specificity of Conditioning
KINS 236 Sport and Society
KINS 258 Research in Motor Learning
KINS 262 Psychological Aspects of Peak Performance
KINS 270 Instructional Strategies for Physical Activity and Sport

Select 10 units of electives in consultation with an advisor 10

Total Units 19

Movement Studies/Strength Condition Option
KINS 203 Specificity of Conditioning 3
KINS 295 Practicum 3
Select two of the following: 6

- KINS 236 Sport and Society
- KINS 258 Research in Motor Learning
- KINS 262 Psychological Aspects of Peak Performance
- KINS 270 Instructional Strategies for Physical Activity and Sport

Select 6 units of electives in consultation with advisor 6

Total Units 18

**Movement Studies/Sports Psychology Option**

- KINS 260 Psychology Of Sport 3
- KINS 262 Psychological Aspects of Peak Performance 3
- KINS 295 Practicum 1

Select two of the following: 6

- KINS 203 Specificity of Conditioning
- KINS 236 Sport and Society
- KINS 258 Research in Motor Learning
- KINS 270 Instructional Strategies for Physical Activity and Sport

Select 3 units of electives in consultation with advisor 3

Total Units 16

**Movement Studies/Sport Pedagogy Option**

- KINS 270 Instructional Strategies for Physical Activity and Sport 3
- KINS 276 Teaching and Coaching Effectiveness 3
- KINS 295 Practicum 1

Select two of the following: 6

- KINS 203 Specificity of Conditioning
- KINS 236 Sport and Society
- KINS 258 Research in Motor Learning
- KINS 262 Psychological Aspects of Peak Performance

Select 6 units of electives in consultation with advisor 6

Total Units 19

**Note:** Student teaching, extension courses, undergraduate fieldwork, and 300-numbered methods or workshop courses may not be applied to the MS program requirements.

Please see the Department Web site for the most current program requirements.

**KINS 4. Beginning Swimming.** 1 Unit

**General Education Area/Graduation Requirement:** Understanding Personal Development (E)

Development of physical and mental adjustment to the water. Basic instruction in front crawl, back crawl, elementary backstroke, breast and side strokes and survival is stressed.

**Note:** May be repeated for credit.

**KINS 5. Intermediate Swimming.** 1 Unit

**General Education Area/Graduation Requirement:** Understanding Personal Development (E)

Development of physical skills involving strokes, turns, safety and survival techniques.

**Note:** May be repeated for credit.

**KINS 9. Beginning Sailing.** 1 Unit

**Prerequisite(s):** 50 yards swimming ability.

Instruction in the fundamentals of sailing including safety and a discussion of terminology and technology of sailing. Additional charge for off-campus services.

**Note:** May be repeated for credit.

**KINS 10. Intermediate Sailing.** 1 Unit

Continuation of KINS 25, using our fleet of C-15s, Laser and Hobie Turbo 14s. Covers rigging, boating safety, sailing, theory and racing tactics.

**Note:** May be repeated for credit.

**KINS 11. Basic Windsurfing.** 1 Unit

Introduces the student to the basic fundamentals of windsurfing. Covers rigging, terminology, balance, stance, sail adjustment, safety, rescue skills, and tricks.

**Note:** May be repeated for credit.

**KINS 12. Water Skiing.** 1 Unit

**Prerequisite(s):** 50 yards swimming ability.

Basic water skiing, boat and boating safety and in the fundamental skills in water skiing. Additional charge for off-campus services.

**Note:** May be repeated for credit.

**KINS 14. Basic Olympic Rowing.** 1 Unit

Teaches the novice rower oar control, basic commands, and correct style. Students will begin rowing on a modern eight-oared racing shell and be introduced to the one person rowing single.

**Note:** May be repeated for credit.

**KINS 15. Introduction to Fly Fishing.** 1 Unit

KINS 15 is a course designed for Sacramento State students of all experience levels to develop proficiency in the sport of fly fishing while promoting an appreciation of the sport as a socio-cultural and lifetime recreational pursuit. Instruction/participation will include, but is not limited to the following topics: conditioning, conservation techniques, equipment use/care/selection, fly casting, aquatic entomology, stream hydrology, interpretation of fly fishing opportunities, fly fishing tactics, basic knots, and field trips to local streams.

Field trip(s) may be required.

**KINS 21. First Year Seminar: Becoming an Educated Person.** 3 Units

**General Education Area/Graduation Requirement:** Understanding Personal Development (E)

Introduction to the nature and possible meanings of higher education, and the functions and resources of the University. Designed to help students develop and exercise fundamental academic success strategies and to improve their basic learning skills. Provides students with the opportunity to interact with fellow classmates and the seminar leader to build a community of academic and personal support.
KINS 22. Creative Aerobic Fitness I.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Provides student with a wide range of flexibility, strength, muscular endurance and creative cardiovascular endurance (aerobic) exercises that promote physical fitness, positive changes in body composition and stress reduction when performed regularly.  
**Note:** May be repeated for credit.

**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Using the unique buoyancy and resistance properties of water, the course includes aquatic exercises for flexibility, strength, and cardiovascular endurance to promote general fitness, body conditioning, and stress reduction. As the course will take place in shallow water, swimming proficiency is not required.  
**Note:** May be repeated for credit.

KINS 26. Exercise For Fitness.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Designed to encourage self-improvement through posture evaluation, biomechanic analysis of exercises performed and through participation in varied exercise forms. Students will develop a personalized repertoire of strength, suppleness and stamina exercises calculated to improve possible deficiencies in posture or movement to optimize enjoyment of living.  
**Note:** May be repeated for credit.

**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Jogging will expose the student to the fundamentals of jogging/running, its potential physiological and sociological benefits as a lifetime activity, fitness testing and individualized conditioning programs.  
**Note:** May be repeated for credit.

KINS 30. Bicycling.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Cycling as a lifestyle sport; physiological benefits derived from bicycle riding; individual functional evaluation and conditioning, cycle touring. Lecture one hour; activity two hours.  
**Note:** May be repeated for credit.

KINS 33. Intermediate Weight Training.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Weight training as a lifetime fitness activity; emphasis on going beyond the beginning level through development of an individualized program designed to meet the needs of each individual.  
**Note:** May be repeated for credit.

KINS 36. Beginning Olympic Weight Lifting.  
**Prerequisite(s):** KINS 33 or equivalent.  
Introduces the lifter to the sport of weight lifting which consists of the two lifts (two hands snatch and the two hands clean and jerk) used in Olympic competition. It includes the complete breakdown of the two lifts, the assistive lifts necessary to learn the parts of the two lifts, and the proper training sequence. The students will also be introduced to training cycles, proper diet, and the use of assistive equipment.  
**Note:** May be repeated for credit.

KINS 40. Tai Chi.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Examines the historical, philosophical, psychological and physiological aspects of Tai Chi. Students will be provided the opportunity to experience a wide range of movement patterns that focus on the integration of mind and body. The form and structure of technique as well as breathing exercises will be included.  
**Note:** May be repeated for credit.

KINS 43. Beginning Tae Kwon Do.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Primary emphasis on throwing, blocking, punching and kicking. The philosophy of Truism and Confucianism is explored.  
**Note:** May be repeated for credit.

KINS 46. Beginning Judo.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Instruction in judo tactics including throws and falls, conditioning, and protective devices for self-defense.  
**Note:** May be repeated for credit.

KINS 50. Uechi-Ryu Karate.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Examines the historical, philosophical, and physical aspects of Uechi-Ryu Karate. Students will be asked to learn the basic techniques and skills used in this Okinawan system as well as to develop and improve in body strength, flexibility and coordination.  
**Note:** May be repeated for credit.

KINS 56. Beginning Self-Defense for Women.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Prepares women to deal psychologically, sociologically and physically with rape and violent assault. The physical tactics taught are based on the use of hands and feet as weapons. They are simple yet an effective use of one's strength and mental attitude.  
**Note:** May be repeated for credit.

**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Multifaceted conditioning course that utilizes self defense techniques to develop self discipline, confidence and respect for physical capabilities and limitations of others.  
**Note:** May be repeated for credit.

KINS 63. Beginning Ballroom Dance.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Development of proficiency in ballroom dance, including history, vocabulary, ballroom dance etiquette and basic steps for foxtrot, waltz, hustle, cha cha, tango, rhumba, salsa, and merengue.  
**Note:** May be taken for credit more than once for credit.

KINS 72. Beginning Basketball.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Development of fundamental skills and tactics of the game, knowledge of basic strategy and rules. Emphasis given to individual and team concepts as they relate to performance and competition.  
**Note:** May be repeated for credit.

KINS 73. Intermediate Basketball.  
**General Education Area/Graduation Requirement:** Understanding Personal Development (E)  
Advancement of basketball skills and strategy. Emphasis is given to individual and team concepts as they relate to performance competition and officiating basketball.  
**Note:** May be repeated for credit.
KINS 75. Beginning Volleyball. 1 Unit
General Education Area/Graduation Requirement: Understanding Personal Development (E)
Develop basic skills, basic offensive and defensive systems of team play, basic strategies and rules. Emphasis on team work and developing supportive attitudes and behavior which encourages continued involvement in volleyball as a physical activity.
Note: May be repeated for credit.

KINS 79. Beginning Soccer. 1 Unit
Development of basic skills of ball handling, passing, dribbling, trapping, tackling, individual and team tactics and strategies; rules interpretation and officiating; promotion of bio-psychosocial well being.
Note: May be repeated for credit.

KINS 83. Beginning Golf. 1 Unit
General Education Area/Graduation Requirement: Understanding Personal Development (E)
Development of sufficient basic proficiency in golf to recognize and enjoy it as a lifetime activity; including U.S.G.A. rules, etiquette and the fundamental mechanics involved in the use of irons and woods.
Note: May be repeated for credit.

KINS 86. Beginning Tennis. 1 Unit
General Education Area/Graduation Requirement: Understanding Personal Development (E)
Development toward proficiency in tennis, including basic court skills, knowledge, and elementary strategies. Development of enjoyable and appropriate cooperative and competitive modes of behavior, including etiquette and self-awareness. Attention is given to healthful approaches to vigorous lifetime physical activity.
Note: May be repeated for credit.

KINS 87. Intermediate Tennis. 1 Unit
Development and refinement of skills at the intermediate level in all strokes. Development and refinement of playing techniques and strategies. Learning how to enjoy competitive situations and to relate well to others in competition. Adjustment to stressful competitive conditions and improvement of personal responses under stress.
Note: May be repeated for credit.

KINS 89. Beginning Badminton. 1 Unit
Development of fundamentals in badminton including beginning skills, offensive and defensive tactics and strategy; singles, doubles and mixed doubles tournament play.
Note: May be repeated for credit.

KINS 90. Intermediate Badminton. 1 Unit
Development of movement skills, strokes, tactics in singles and doubles at a more advanced level. Emphasis on "cut" or deceptive strokes, rotation or diagonal system of doubles play, increased ability to move on the court, application of laws to move difficult playing situations. Singles, doubles and mixed doubles play in tournaments.
Note: May be repeated for credit.

KINS 91. Alpine Skiing and Snowboarding. 1 Unit
General Education Area/Graduation Requirement: Understanding Personal Development (E)
Designed to develop proficiency at all skill levels of alpine skiing, beginner through expert, while promoting appreciation of the sport as socio-cultural phenomena and lifetime pursuits. Sessions will take place at a scheduled Sierra ski area as well as on campus. Additional fee.
Note: May be repeated for credit.

KINS 92. Beginning Racquetball. 1 Unit
General Education Area/Graduation Requirement: Understanding Personal Development (E)
Fundamental theory and practice of the game of racquetball including service, receiving the service, back wall play, basic shots, variations, court positioning and general tactics; history rules, and safety precautions.

KINS 93. Intermediate Racquetball. 1 Unit
Development of proficiency at the intermediate level. Includes service and return, back wall play, offensive and defensive shots with emphasis on techniques, strategy and tactics of competition.
Note: May be repeated for credit.

KINS 99. Exercise for Healthy Living. 2 Units
Corequisite(s): One unit skill or fitness class; may be taken concurrently.
General Education Area/Graduation Requirement: Understanding Personal Development (E)
Exposes students to a broad range of information related to the understanding and development of personal fitness and health, including psycho-social well-being. Examines the elements of exercise, nutrition, and stress management as they relate to healthful living. Students will explore a variety of personal choices and the options for developing and maintaining lifetime wellness.

KINS 106C. Advanced Weight Training. 1 Unit
Advanced instruction in weight lifting including Olympic weight lifting, power lifting, body building, lifting for athletic competition and lifting for physical fitness.

KINS 110. Women and Sport. 3 Units
Role of women in sport; an inquiry into traditional and contemporary attitudes and practices regarding the woman's role in the sporting world.

KINS 118A. Martial Arts: Karate. 3 Units
General Education Area/Graduation Requirement: Humanities (Area C2), Race & Ethnicity Graduation Requirement (RE)
Explores the ancient tradition of the Asian martial arts in conjunction with actual participation in a selected martial arts course. Asks the student to critically examine the cultural contributions of specific Asian communities such as Japan, China, and Korea, to the Martial Arts as practiced in the U.S.

KINS 118B. Martial Arts: Taekwondo. 3 Units
General Education Area/Graduation Requirement: Humanities (Area C2), Race & Ethnicity Graduation Requirement (RE)

KINS 118C. Martial Arts: Tai Chi. 3 Units
General Education Area/Graduation Requirement: Humanities (Area C2), Race & Ethnicity Graduation Requirement (RE)

KINS 120. Strength and Conditioning. 3 Units
Prerequisite(s): Restricted to Kinesiology, Pre-Exercise Science, or instructor approval.
The course is designed to introduce students, persons interested in the personal training field, strength & conditioning and/or prospective coaches at the high school, college, or professional level, public, private settings to what are commonly referred to as training units. These training units are part of the total training program an individual/student/athlete would use to prepare for participation in fitness activity or sport. Included are practical hands-on participatory experiences, program design strategy and practical field tests.

KINS 121. Peak Performance Through Psychological Skills. 3 Units
Examination of, and practical experience in, techniques for maximizing sport and creative performance through the development of mental skills and strategies for stress control, imagery, goal setting, and concentration.
### KINS 122B. Cardiopulmonary Resuscitation. 1 Unit
Designed to meet American Red Cross or American Heart Association Certification in CPR.
**Note:** May be repeated for credit.
Credit/No Credit

### KINS 130. Elementary Physical Education Curriculum and Content. 3 Units
**Prerequisite(s):** KINS 138; Restricted to junior or senior Kinesiology majors-Physical Education concentration.
Overview of the total elementary physical education curriculum. Designed specifically for physical education concentration students. The primary focus will be placed on cooperative activities, movement education, development of locomotor, non-locomotor, manipulative skills, perceptual motor activities, fitness, games, and the correlation of classroom subjects with physical education. Introduces students to developmentally and instructionally appropriate physical education for children. Students will be able to develop a scope and sequence for an elementary physical education curriculum.

### KINS 131. Secondary Physical Education Curriculum. 2 Units
**Prerequisite(s):** KINS 138; Kinesiology major - Physical Education concentration students only.
Designed for senior level students in the Kinesiology major, Physical Education Option, Credential Concentration who wish to deliver an effective, meaningful physical education curriculum to diverse students. Covers curriculum components that include content, content organization, distinctive curriculum models and aspects of curriculum application. Students will learn how to sustain a positive learning experience, conceive and plan meaningful curricula for school based instruction, and to link the school program to opportunities for adolescents outside of school.

### KINS 132. Planning, Designing and Managing a Fitness Center. 3 Units
Designed to provide students with the basic guidelines for starting and managing multiple health and fitness centers in the private setting; focus on initial start-up of a health and fitness center and operating procedures with emphasis on equipment selection and arrangement, employee training, program planning for safe and optimally beneficial health and fitness results.

### KINS 133. Integration of Concepts. 3 Units
**Prerequisite(s):** KINS PETE or PACC majors only; and GWAR certification before Fall 09; or WPJ score of 80+; or 3-unit placement in ENGL 109M or ENGL 109W; or 4-unit placement in ENGL 109M or ENGL 109W and co-enrollment in ENGL 109X; or WPJ score 70 or 71 and co-enrollment in ENGL 109X.
**General Education Area/Graduation Requirement:** Writing Intensive Graduation Requirement (WI)
Critical perspective of how theoretical concepts and integrated knowledge can be applied to various aspects of physical education, sport, and physical activity. Emphasis is on a coherent understanding of the interrelationships that exist in the subdisciplines of kinesiology and other related subject areas. Capstone experience for students in the Physical Education Concentration; must be taken during the final semester of the student’s plan of study.

### KINS 134. History and Philosophy of Physical Education and Sport. 3 Units
Examination of historical events in physical education and sport; examination of how these historical events have influenced the varying philosophies of physical education, sport, and physical activity, past and present; identification of societal forces in cultures which lead to philosophical beliefs and concepts relative to the structure of the disciplines of physical education, sport, and physical activity.

### KINS 135. Assessment Strategies in Physical Education. 3 Units
Selection, analysis, construction and administration of norm-referenced and criterion-referenced tests used for formative and summative evaluation in the physical education public school setting. Includes both traditional and alternative assessment strategies. Computers are used for data collection, development of assessment instruments, development of grading programs, and for descriptive statistical analysis.

### KINS 136. Sport And Aging. 3 Units
Considers the positive and negative aspects of vigorous exercise and/or sport activity throughout the aging process. Included will be inquiry into the opportunities for activity among adults over the age of thirty, through the active career years, and beyond.

### KINS 137. Sociology Of Sport. 3 Units
Analyzes sport as a social institution and the interrelations between sport and societal subsystems. Consideration of the attitudes, values, and behaviors associated with sport. Analyzes contemporary problems associated with sport: race relations, the traditional and emergent role of women, leisure behavior, aggression and violence, and political and economic concerns. Analyzes a sociological problem within the context of sport.

### KINS 138. Teaching Strategies in Physical Education. 3 Units
**Prerequisite(s):** Physical Education Majors, Minors and Liberal Studies PE Concentration.
Introduction to teaching in K-12 schools for physical education majors. Topics include: professionalism, philosophy, the CA framework, lesson/unit planning, class management, organization techniques, communication skills, teaching styles and effective teaching skills. (Students will be required to complete four observations off campus and two peer-teaching assignments on campus.) Serves as a prerequisite or corequisite for all skill analysis classes in the major.

### KINS 139. Leadership and Communication. 3 Units
Social actions and behavioral patterns as influenced by the communication process; experiential approaches to techniques of interpersonal and small group relationships and leadership; the constantly evolving communication media as instruments of behavioral change.

### KINS 141. PRO ACT I - Dual Sports. 3 Units
**Prerequisite(s):** KINS 138
**Corequisite(s):** KINS 138
Designed to prepare physical education students to analyze and teach developmentally appropriate activities designed for dual participation in the public school setting. Student will be given opportunity to learn and apply the basic techniques of tennis, badminton and pickleball as well as the offensive and defensive net strategies for game play. Emphasis will be given to skill acquisition analysis.
KINS 142. Professional Activities II - Creative Movement and Dance. 3 Units

Prerequisite(s): KINS 138
Corequisite(s): KINS 138
Students will develop an understanding of the content specific to the design and delivery of educational gymnastics and rhythm/dance activities in a K-12 setting. Gymnastics components include: skills, appropriate progressions, spotting techniques, safety and methods of organization. Rhythm and dance will include basic locomotive skill development; basic rhythm activities; and contemporary, line, square, round, contra, folk, country and Western and social/ballroom dance. Historical and multicultural concepts related to dance are also included.

KINS 144. Analysis of Weight Training Muscular Fitness. 2 Units

Prerequisite(s): Restricted to Kinesiology, Pre-Exercise Science, Coaching Minor or instructor approval
The course is designed to prepare students to teach, design, and implement strength/conditioning for various fitness/athletic populations. Included are skill techniques, skill analysis, class/group organization, equipment analysis, muscular fitness related to athletics, fitness, rehabilitation, and other factors related to effective teaching of muscular fitness in high school, college, private, public and corporate settings. Emphasis is on kinesiology/biomechanics principles, human anatomy, and physiological adaptations to the various strength/conditioning for fitness/athletic training covered in the course.

KINS 145. Pro Act III - Team Sports. 3 Units

Prerequisite(s): KINS 138
Corequisite(s): KINS 138
This is an introductory course designed for students within the Kinesiology Major Physical Education Concentration to analyze the teaching of field sports in secondary school settings. This course provides the student the opportunity to learn basic techniques, strategies, and rules of flag football, volleyball, softball, soccer and basketball. Emphasis will be given to skill performance, skill development, teaching methodology, skill analysis, lead-up activities, and sport participation.

KINS 146. PRO ACT IV Individual Sports. 3 Units

Prerequisite(s): KINS 138
Corequisite(s): KINS 138
Designed to prepare physical education students to analyze and teach developmentally appropriate activities designed for individual participation in the public school setting. Student will be given the opportunity to learn and apply the basic techniques of golf, track and field and aquatics as well as the strategies necessary for effective participation. Emphasis will be given to skill acquisition and analysis.

KINS 148. ProAct V - Nontraditional Games and Sports. 3 Units

Prerequisite(s): KINS 138
Corequisite(s): KINS 138
Students will develop an understanding of the content specific to the design and delivery of non-traditional games and sports. Instruction will focus on performance, skill analysis, methods of teaching, strategies for instruction, and evaluation of skills in K-12 settings. The students will be introduced to a variety of nontraditional games and outdoor activities, as well non-traditional team sports including Lacrosse, Ultimate Frisbee, Speedball, Team Handball, and Field Hockey.

KINS 149. Professional Activities of Health and Skill Related Fitness. 3 Units

Prerequisite(s): KINS 138
Corequisite(s): KINS 138
Students will develop an understanding of the content specific to the design/delivery of a variety of innovative fitness/wellness learning experiences for individuals in K-12 settings. Emphasis will be placed on movement and its relationship to the components of health fitness when pursuing and promoting a physically active lifestyle. Students will develop skills in assessing fitness levels and implementing strategies for supporting positive behaviors and attitudes toward fitness/wellness for individuals from diverse populations.

KINS 150. Exercise and Sport Physiology. 3 Units

Prerequisite(s): BIO 30 or BIO 26 or equivalent
General Education Area/Graduation Requirement: Further Studies in Area B (B5), Laboratory (B3)
Sports physiology with special emphasis on studying the various systems in the body that are involved in work, exercise and sport. Training programs to improve these systems and their responses will be discussed in a wide variety of settings including exercise for health, fitness, recreation, and sports competition. Lecture two hours; laboratory three hours.
Note: Does not satisfy exercise physiology requirement for Exercise Science majors.

KINS 151. Kinesiology. 3 Units

Prerequisite(s): BIO 22 or equivalent
Anatomical concepts and physical laws as applied to human movement emphasizing the effects of individual and environmental variables. Includes analysis of normal and pathological gait. Lecture two hours; laboratory three hours.

KINS 151A. Biomechanics. 3 Units

Prerequisite(s): KINS 151
Introduction to fundamental mechanical concepts as they apply to human movement. A broad range of human movement will be explored including activities from sport, industrial settings, normal and pathological locomotory skills, and movements involved in manipulating the environment in which we live. Laws of physics, mechanical principles and mathematical concepts will be integrated in studying man as a biological entity. Lecture two hours; laboratory three hours.

KINS 151B. Biomechanics II. 3 Units

Prerequisite(s): BIO 10, BIO 22, KINS 151, and KINS 151A
The study of biomechanical theory in regards to quantifying and analyzing human movement. Human movement will be examined from an advanced perspective, including tissue mechanics, the pathomechanics of chronic disease, and exercise and sport performance.

KINS 151C. Dance Kinesiology. 3 Units

Prerequisite(s): BIO 22 or equivalent
Human musculoskeletal and neurological systems, energy production, and biomechanical interrelationships of human motion applied to dance. Emphasis on the nervous, muscular and tendinous structures and the mechanical function of levers and force application and injury prevention for the dancer.
KINS 151D. Applied Kinesiology and Biomechanics. 3 Units
Prerequisite(s): BIO 30 with a grade of C or BIO 26
Fundamentals of human movement patterns with an emphasis on applied anatomy, movement principles, movement sequences, applied biomechanics, developmental motor stages and basic movement analysis.
Note: Does not satisfy kinesiology or biomechanics requirements for Exercise Science majors.

KINS 152. Physiology Of Exercise. 3 Units
Prerequisite(s): CHEM 1B or CHEM 6B and BIO 131
Study of circulatory, respiratory and metabolic response to exercise in humans under various physiological and ambient conditions. Lecture 2 hours; laboratory 2.5 hours.

KINS 152A. Fundamentals of Exercise Programs. 3 Units
Prerequisite(s): KINS 152.
Study of current training programs used in different types of activity. Emphasis will be placed on specific training techniques, nutritional needs, methods of testing/evaluating, and special considerations needed for various populations.

KINS 152B. Exercise Physiology of Women. 2 Units
Examines the general physiology of women, how physical activity affects women's physiological functions, and how physiological functions affect women in sport and exercise performance. A comprehensive review of scientific literature is included.

KINS 152C. Prolonged Exercise. 2 Units
Prerequisite(s): An introductory college biology or zoology course.
Extensive review of the energy metabolism, cardiovascular and pulmonary function, endocrine response, nutritional need, training effect, and biochemical response to prolonged exercise of 1-6 hours in duration.

KINS 152D. Blood Lactate and Exercise. 2 Units
Prerequisite(s): KINS 152.
Reviews the basic aspects of lactate formation, release, and uptake by skeletal muscle and blood during exercise and training. Presents recent clinical and research findings related to physical performance.

KINS 152S. Energy Production Sports Performance. 3 Units
Prerequisite(s): KINS 152 and co-enrollment in KINS 153 or Instructor Permission Recommended: FACS 10 & FACS 113
Study of ergogenic aids, exercise nutrition and exercise performance enhancing drugs/supplements and their physiological effects on energy production and exercise performance. Lecture: 3 hours

KINS 153. Cardiovascular Testing and Exercise Prescription. 3 Units
Prerequisite(s): KINS 152 or instructor permission.
Designed to train exercise leaders, exercise test technologists, and exercise program directors. Focus is upon development of basic skills, both administrative and technical, needed to develop a program of graded exercise testing and exercise prescription for asymptomatic and symptomatic populations. Lecture two hours; laboratory three hours.

KINS 153C. Cardiac Rehabilitation Exercise Electrocardiography. 3 Units
Prerequisite(s): KINS 153 or Instructor Permission
Study of cardiac rehabilitation and exercise electrocardiography, reviews clinical pathophysiology and ECG abnormalities during rest, exercise stress testing and cardiac rehabilitation. Lecture 3 hours.

KINS 154A. Principles and Techniques in a Clinical Setting. 3 Units
Prerequisite(s): Athletic Training or Kinesiology majors only; instructor permission
Introduction to professional ethics and attire, the allied health care system, patient transfers, wheelchair and ambulation aids, medical terminology and record keeping. Fundamental principles and concepts underlying the therapeutic application of modalities, including methods of administering heat, cold, electricity, sound, light and water are covered.

KINS 154B. Management and Health Care Administration in Athletic Training. 3 Units
Prerequisite(s): Instructor permission only
Organization, management and health care administration of athletic training programs. Includes communication skills, budget, facility design and management, legal aspects, drug testing, education, computer use, insurance and record keeping, personnel development (job search, CEUs, licensure), professional and governing organizations, athletic training reporting systems, emergency action plans, blood borne pathogen procedures, preparticipation exam management, health care issues and fundraising.

KINS 154C. Therapeutic Modalities Laboratory. 1 Unit
Prerequisite(s): BIO 22 or BIO 26, and KINS 154A, and KINS 156, and instructor permission.
Techniques and clinical skills in the treatment of injuries using therapeutic modalities. Hands-on experience in the clinical application of contemporary therapeutic modalities (electrotherapeutic modalities, hydrotherapeutic modalities, cryotherapy, radiant energy, paraffin, intermittent compression units, traction units, massage) including patient preparation, set-up, dosage determination and operational procedures. Lab two hours.

KINS 155A. Clinical Evaluation of the Upper Extremity. 2 Units
Prerequisite(s): BIO 22 or BIO 26, and KINS 154A, and KINS 156.
Analyzes and performance of evaluation procedures of the upper extremity, head and spine. Includes the development of skills in a patient interviewing, palpation methods, manual muscle testing, neurological and orthopedic assessments and special tests.

KINS 155B. Clinical Evaluation of the Lower Extremity. 2 Units
Prerequisite(s): BIO 22 or BIO 26, KINS 154A, KINS 156.
Analyzes and performance of evaluation procedures of the lower extremity, trunk and low back. Includes the development of skills in patient interviewing, palpation methods, manual muscle testing, neurological and orthopedic assessments and special tests.

KINS 156. Care Of Athletic Injuries. 3 Units
Prerequisite(s): BIO 22 or BIO 26, and KINS 154A, KINS 156.
Application and methods of caring for and preventing athletic injuries through strapping, padding, conditioning, etc.; practical application of first aid and a basic introduction to treatment and rehabilitation of common athletic injuries.

KINS 156A. Emergency Response. 2 Units
Prerequisite(s): BIO 22 or BIO 26; KINS 151 or KINS 151D; and KINS 155A or KINS 155B
Biomechanical principles in the prescription of musculoskeletal rehabilitation exercises. Topics include passive, active and resistant range of motion, manual muscle testing, and exercises for strength, stamina and suppleness for every part of the body.
KINS 158. Motor Learning. 3 Units
Prerequisite(s): BIO 22 or BIO 25
Study of the motor and cognitive characteristics of individuals involved in learning and controlling motion skills and the conditions that can influence that learning and control. Lecture two hours; laboratory three hours.

KINS 160. Sport and Exercise Psychology. 3 Units
Application of research findings as they apply to psychological performance factors in sport, physical education and exercise settings, such as motivation/adherence, stress management, personality and psychological skills training.

KINS 161. Theory of Sport and Fitness Management. 3 Units
This course is designed to introduce students to the basic theory underlying the multiple components of the sport and fitness industry. Fundamental concepts and theories of sports and fitness management will be applied to various segments of the sports industry: professional sports, collegiate sports, community sports and recreation, intramural sports and corporate fitness.

KINS 165. Theory of Coaching. 3 Units
Students will be introduced to coaching theory as it relates to developing leadership skills to work with athletes, and teams in the context of organized sport. Topics will include motivation, self-esteem, leadership, communication, competition and cooperation, team management, and optimal performance skills (goal setting, concentration, composure, recovery from mistakes/loss, consistency, and stress management).

KINS 166. Ethics, Inclusion and Equity in Coaching. 3 Units
This course educates future coaches on the moral and ethical dilemmas typically encountered in competitive athletics. Students will also develop strategies to address various forms of exclusion and inequity in sports and athletics.

KINS 167. The African American Sport Experience. 3 Units
Examination of the experiences of the African American athlete in sport and society, from the period of enslavement to the contemporary era. Topics include gender experiences, intercollegiate experiences, professional sport, and the Olympic games, as well as the interconnections between African American communities and the role of sport. The experiences of African Americans will be compared to those of other ethnic and cultural groups.

KINS 168. Sport and Film. 3 Units
This course uses sport films to examine relationships of power in society and the way those relationships are contested and often reinforced. Particular attention will be paid to cultural tensions and negotiations around issues related to race, gender, class, and sexuality. This course utilizes films, with accompanying readings, to understand the institution of sport in American culture, as well to understand how sport is setting where issues of race, class, gender, religion, ability/disability, and sexuality are contested and reinforced.

KINS 169. The Modern Olympic Games. 3 Units
A study of the historical development of the modern Olympic Games. Areas covered include politics, nationalism, commercialism, marketing and amateurism. The contribution of athletes and administrators who have help shape the Olympic tradition will be assessed.

KINS 171. Adapted Physical Education: Basic Skill/Fitness Activities and Assessment. 3 Units
Prerequisite(s): KINS 177.
Development of competencies for planning, developing, and evaluating effective skill and fitness activities for students with disabilities. Emphasis will be placed on basic skill development, fitness and traditional and alternative assessment strategies and postures assessment and programming for students with disabilities. Information regarding the application of specific standardized assessment instruments for placement decisions will be examined. Students will be required to participate in 15 hours of service learning. Class meets for 2 hours lecture and 2 hours activity.

KINS 172. Movement Education. 3 Units
Prerequisite(s): Liberal Studies or Child Development majors only, or instructor permission
Examination of activities and theoretical concepts that relate to the physical, social, emotional and intellectual development of the individual. Content includes: health-related physical fitness, movement concepts, stability, locomotor and manipulative skills, rhythms and dance, gymnastics, games and sport activities.

KINS 176. Perceptual Motor Development. 3 Units
Study of the genetic, prenatal, perinatal and postnatal factors affecting the sequential perceptual motor development of children. Inquiry is made into reflexes, sensory motor testing and stimulation, perceptual motor testing and remedial activities in motor development.

KINS 177. Introduction to Adapted Physical Education. 3 Units
Prerequisite(s): KINS 171 and KINS 177.
Historical and philosophical bases for adapted physical education, including the development and management of programs with emphasis on the psychomotor, affective and cognitive domains. The impact of federal and state legislation, legal liability and special health and safety problems will be studied in relationship to the role of the adapted physical education teacher, the interdisciplinary team, the parent and the pupil.

KINS 179. Adapted Physical Education: Program Planning. 3 Units
Prerequisite(s): KINS 171 and KINS 177.
Study of the variables in physical education curriculum and program planning - assessment, goals and objectives, development of program content, and evaluation - as related to individuals with disabilities.

KINS 194A. Assigned Field Experience in Kinesiology. 1 - 2 Units
Assigned experience in the conduct of physical education. Students keep records of daily experiences and prepare periodic progress reports. Students receive one unit of credit for three hours per week for one semester of field experience.
Note: Registration requires prior approval of the department coordinator. May be repeated for a total of five units.

KINS 194B. Assigned Internship in Exercise Science. 1 - 3 Units
Prerequisite(s): KINS 151 and/or KINS 152; or instructor permission.
Assigned internship other than in the Human Performance Lab. The student will assist in laboratory experiments and other special procedures; will learn the operation of equipment and sequentially will be expected to administer tests and interpret the results. Interns will be expected to attend monthly conferences.
Note: May be repeated for a total of 3 units.

Credit/No Credit
KINS 194C. Assigned Field Experiences in Pre-Physical Therapy. 1 - 2 Units
Assigned experience under the direction of a physical therapist. Students keep records of their experiences. Registration requires prior approval of the pre-physical therapy coordinator.
Note: May be repeated up to a total of 6 units. Open to Physical Education majors in the pre-physical therapy option.
Credit/No Credit

KINS 194D. Assigned Field Experience in Coaching. 1 - 2 Units
Assigned experience in coaching (two hours daily for the full schedule of the sport for two units of credit). Students keep records of daily experiences and prepare periodic progress reports. Succeeding enrollments should be in different sports.
Note: May be repeated for a total of 6 units.
Credit/No Credit

KINS 194E. Assigned Internship in Adapted Physical Education. 1 - 3 Units
Prerequisite(s): Any two of the following: KINS 171, KINS 176, KINS 177, or KINS 179; permission of adapted credential advisor.
Assigned experience in the conduct of Adapted Physical Education Programs. Students will keep records of their experiences. Three clock hours per week per unit of credit. Credential candidates may not use in lieu of Phase III requirements.
Note: May be repeated up to six times for credit for a maximum of 6 units.
Credit/No Credit

KINS 194F. Assigned Field Experience in Allied Health. 1 - 3 Units
Prerequisite(s): Instructor’s permission only
Practical experience in Occupational Therapy, Chiropractic or other allied health professions. Students keep records of their experiences while working under the direct supervision of a licensed clinician. Registration requires prior approval of a Pre-Physical Therapy advisor.
Note: May be repeated up to a total of 6 units.
Credit/No Credit

KINS 194G. Assigned Professional Experience. 1 - 2 Units
Assigned professional experience in organization and evaluation of physical education, athletic training, exercise or pre-therapy. Students work closely with a Sacramento State faculty member and receive one unit of credit for three hours of work per week for one semester.
Note: May be repeated for a total of 3 units toward graduation. These units may not be applied to the major.
Credit/No Credit

KINS 194H. Assigned Field Experience in Athletic Training. 1 - 3 Units
Prerequisite(s): Instructor’s permission only
Practical experience in athletic training under the direct supervision of an NATA Certified Athletic Trainer in one of the following settings: professional athletics, high school, clinic, industrial or private business.
Note: Registration requires prior approval of the program director. May be repeated up to a total of 3 units.
Credit/No Credit

KINS 195A. Directed Field Experience in Kinesiology. 1 - 2 Units
Directed experience in the conduct of physical education. Students keep records of daily experiences and prepare periodic progress reports. Students receive one unit of credit three hours per week for one semester of field experience.
Note: Registration requires prior approval of the department coordinator. May be repeated for a total of 5 units.
Credit/No Credit

KINS 195B. Directed Internship in Exercise Science. 1 - 3 Units
Prerequisite(s): KINS 151 and/or KINS 152; or instructor permission.
Directed internship in the Human Performance Laboratory under the supervision of one or more members of the faculty. The student will assist in laboratory experiments and other special procedures; will learn the operation of equipment and sequentially will be expected to administer tests and interpret the results. Interns will be expected to attend monthly conferences.
Note: May be repeated for a total of 3 units.
Credit/No Credit

KINS 195C. Directed Observation in Athletic Training. 1 - 2 Units
Prerequisite(s): Requires prior approval of Program Director
Directed student observation of the health care practices of the Athletic Trainer and other sports medicine personnel in a clinical setting. Selected NATA competencies may be completed on site. 60 hours per unit.
Note: May be repeated for up to 4 units total credit.
Credit/No Credit

KINS 195D. Practicum in Athletic Training. 4 Units
Prerequisite(s): Instructor’s permission only
Supervised athletic training experience in the athletic training room under the direct supervision of a Certified Athletic Trainer. Included are a series of guest lectures from the medical and paramedical field presenting lectures and demonstrations on topics in sports medicine. 300 hours plus all lectures are 4 units.
Note: Can be taken a minimum of four times and maximum of five times for credit, with the total units not to exceed 20 units.
Credit/No Credit

KINS 196. Experimental Offerings in Kinesiology. 2 - 3 Units
Guided study and discussion of problems and topics in kinesiology. Supplemental readings, reports, and term projects are included. Proseminars dealing with specific topics or problems will be scheduled when the need exists.
Note: May be repeated for credit up to three times for credit.

KINS 198A. Seminar in Physical Education - Elementary. 2 Units
Prerequisite(s): KINS 381 and EDTE 474A.
Corequisite(s): KINS 380 and EDTE 474B.
Open to physical education single subject credential candidates this course accompanies an eight-week elementary student teaching experience. The focus is twofold: a) engage student teachers in the planning, instruction and assessment of an elementary physical education program aligned with state standards b) support student teachers with the Performance Assessment for California Teachers (PACT). Candidates will be expected to create a class environment that ensures the safe and productive participation in developmentally appropriate elementary physical education.
KINS 198B. Seminar in Physical Education - Secondary. 1 Unit
Prerequisite(s): KINS 198A.
Corequisite(s): EDTE 474B.
Open to physical education single subject credential candidates this eight-week course accompanies an eight-week secondary student teaching experience. The focus is twofold: a) engage student teachers in the planning, instruction and assessment of a secondary physical education program aligned with state standards b) support student teachers with the Performance Assessment for California Teachers (PACT). Candidates will be expected to create a class environment that ensures the safe and productive participation in developmentally appropriate secondary physical education.

KINS 199. Directed Individual Study. 1 - 3 Units
Individual research, project or directed reading. Open only to majors who appear competent to carry on individual work. Approval of the faculty under whom the individual work is to be conducted, and approval of the Department Chair required. Formal written report required.
Note: May be repeated for credit.

Credit/No Credit

KINS 203. Specificity of Conditioning. 3 Units
Survey of current research in training regimen of conditioning programs designed to optimize physical conditioning in preparation for specific athletic competitions.

KINS 209. Graduate Studies in Kinesiology. 3 Units
An overview of the varied subdisciplines, such as sport pedagogy, motor learning, strength and conditioning, sport psychology, cultural studies of sport, exercise physiology, and biomechanics. Students will read research from each subdiscipline and be able to make interdisciplinary connections.

KINS 210. Research Methods in Kinesiology. 3 Units
Various methods and techniques of educational research as they are commonly applied in the field of kinesiology; study of examples of their use in published research; practice in applying them to problems of interest to the student; analyzing data and writing research reports.

KINS 211. Research Seminar. 1 Unit
Students develop and defend research proposals. Students registering for KINS 500 for the first time must register for KINS 211 concurrently.
Note: Student must re-enroll if proposal is not completed and accepted during the first registration

Credit/No Credit

KINS 236. Sport and Society. 3 Units
Society and the institution of sport interact in a variety of ways. Students are given the opportunity to investigate and discuss in-depth a wide range of topics linking sport and society. Among these topics are violence and aggression, politics, racism, sexism, counter-cultures, mass media and the future of sport. The application of research to the real world is an integral part of the course.

KINS 245. Administration of Physical Education and Athletics. 3 Units
The organization and administration of physical education and athletic programs and the functional considerations involved. Primary areas include: personnel, curriculum, budgeting, contract management, public relations, liability and safety, critical issues, and procedures essential to quality programs.

KINS 250. Advanced Exercise Physiology Laboratory. 3 Units
Prerequisite(s): KINS 152 or instructor permission.
Describes, explains, and practices the application of selected measurement techniques in the laboratory as they relate to pertinent research in the areas of exercise physiology. Emphasis will be placed on the use and calibration of equipment as well as adaptation of equipment to different research settings. Lecture two hours; laboratory three hours.

KINS 252. Advanced Exercise Physiology. 3 Units
Prerequisite(s): 1 year of General Chemistry, BIO 131 or equivalent, KINS 152 or equivalent, and KINS 153 or equivalent.
Human physiological responses, from the cellular level to organ system level, to both acute and chronic exercise will be studied in detail with an emphasis on integrative physiological responses to exercise. The course will emphasize a complex regulatory systems approach to the changes and adaptations that occur with exercise. Specifically, how the regulatory systems dictate these changes. The course will aid in the understanding of both theoretical and integrative concepts in the area of exercise physiology. The course will provide a solid foundation that is needed to review and understand complex research in exercise physiology.

KINS 254. Advanced Biomechanics. 3 Units
Prerequisite(s): KINS 151, KINS 210; or instructor permission.
Study human movement from a mechanical perspective utilizing laws of physics and relevant functional anatomical principles. Human movement will be looked at from a broad perspective, including basic movements to more complex skills. Students will use a variety of techniques to study the biomechanical principles of movement production including laboratory work, library research and examination of the appropriate theoretical constructs. Lecture two hours; laboratory three hours.

KINS 258. Research in Motor Learning. 3 Units
Prerequisite(s): KINS 158, KINS 210, or instructor permission.
Designed to provide students with a solid foundation experience in motor learning; focus is on an intensive examination of a selected topic in motor learning; directed individual pilot study and the nature of original laboratory research.

KINS 259. Research in Exercise Physiology. 3 Units
Prerequisite(s): KINS 152, KINS 210, or instructor permission.
Provides students with a solid foundation experience in human performance research. Primary focus is on intensive examination of selected advanced topics in exercise physiology.

KINS 260. Psychology Of Sport. 3 Units
The in-depth study of parameters of human behavior as specifically related to sport including personality factors, motivational techniques, expectancy effects, group dynamics, leadership issues, aggression, arousal, concentration, and goal setting.

KINS 262. Psychological Aspects of Peak Performance. 3 Units
In-depth examination of current research relating to theories of and techniques for performance enhancement in sport and dance through psychological skills strategies.

KINS 270. Instructional Strategies for Physical Activity and Sport. 3 Units
Study of theoretical concepts, models and research that relates to organizational and instructional strategies for physical activity and sport. Along with developing problem solving and critical thinking skills, provides the student with the opportunity to partake in self-directed and cooperative learning experiences, and develops communications skills that will enhance staff development and teaching of individuals and groups in a variety of physical activity and sport environments.
KINS 276. **Teaching and Coaching Effectiveness.** 3 Units
Study of the research methodology, systematic observation, and findings that relate to effective teaching and coaching in the school environment. Provides an analytical approach to the investigation of teaching and coaching behaviors by examining models and critical variables involved in describing, analyzing and interpreting the instructional process.

KINS 294A. **Contemporary Topics in Sport Performance.** 1 - 3 Units
Prerequisite(s): KINS 210.
Advanced research seminars on topics of contemporary interest. Specific topics will vary.
Note: May be taken more than once for credit, provided topic is not repeated.

KINS 294B. **Contemporary Topics in Exercise Physiology.** 1 - 3 Units
Prerequisite(s): KINS 210.
Advanced research seminars on topics of contemporary interest. Specific topics will vary.
Note: May be taken more than once for credit, provided topic is not repeated.

KINS 294C. **Special Topics in Biomechanics.** 1 - 3 Units
Prerequisite(s): KINS 254.
Advanced research seminars on varied topics of contemporary interest.
Note: May be taken more than once for credit, provided topic is not repeated.

KINS 295. **Practicum.** 1 - 3 Units
Prerequisite(s): Approval of graduate faculty advisor and graduate coordinator.
Graduate experiences in a practical setting.
Note: Open only to graduate students within the Physical Education Department.

KINS 296A. **Experimental Elementary Physical Education Workshop.** 1 Unit
Overview of the total elementary physical education curriculum. Major focus will be on appropriate practices, national content standards, establishing a learning environment, movement concepts, skill themes, and health-related physical fitness. Designed to meet the physical education component for graduate students seeking a multiple subject credential.
Note: Not open to undergraduate students, and it does not substitute for KINS 172.

KINS 299. **Directed Individual Study.** 1 - 3 Units
Individual research, project, or directed reading.
Note: Open only to majors who appear competent to carry on individual work. Admission to this course requires approval of the graduate advisor and the graduate coordinator. Formal written report required. May be repeated for credit.

KINS 380. **Methods of Teaching Elementary Physical Education.** 1.5 Units
Prerequisite(s): KINS 130, Corequisite(s): KINS 198A
KINS 380 is an 8 week course designed for the future physical educator who wishes to deliver an effective, meaningful elementary physical education curriculum to a diverse population of students. Emphasis is on physical education pedagogy - the skills and techniques that successful teachers use to ensure student learning.

KINS 381. **Methods of Teaching Secondary Physical Education.** 1.5 Units
Corequisite(s): EDTE 366A
An 8 week course, KINS 381 is designed for the future physical educator who wishes to deliver an effective meaningful physical education curriculum to a diverse population of students. Emphasis is on physical education pedagogy - the skills and techniques that successful teachers use to ensure student learning.

KINS 500. **Culminating Experience.** 1 - 4 Units
Prerequisite(s): Advanced to candidacy. Completion of KINS 211 or concurrent enrollment.
Completion of a thesis or project under the direction of a department committee.