ATTR 651  **Clinical Education I. 2 credits**
Integration of clinical competencies with classroom instruction and a supervised field based experience in athletic training to link theory into practice.
Prerequisite: Enrollment in MS athletic training program.

ATTR 652  **Clinical Education II. 3 credits**
Integration of clinical competencies with classroom instruction and a supervised field based experience in athletic training to link theory into practice.
Prerequisite: ATTR 651, ATTR 660, ATTR 661 with a C or better.

ATTR 653  **Clinical Education III. 3 credits**
Integration of clinical competencies with classroom instruction and a supervised field based experience in athletic training to link theory into practice.
Prerequisite: ATTR 652, ATTR 662, ATTR 663, ATTR 668, ATTR 669 with a C or better.

ATTR 655  **Clinical Education V. 3 credits**
Integration of clinical competencies with classroom instruction and a supervised field based experience in athletic training to link theory into practice.
Prerequisite: ATTR 654, ATTR 664, ATTR 665, ATTR 671 with a C or better.

ATTR 656  **Clinical Education VI. 3 credits**
Integration of clinical competencies with classroom instruction and a supervised field based experience in athletic training to link theory into practice.
Prerequisite: ATTR 655, ATTR 666, ATTR 667, ATTR 670 with a C or better.

ATTR 660  **Prevention and Care of Athletic Injuries. 3 credits**
Prevention strategies and procedures, recognition and care of
common injuries and conditions. Foundational concepts and principles of the athletic training profession are included. Prerequisite: Enrollment in MS athletic training program.

**ATTR 661**  
Prevention and Care of Athletic Injuries Lab. 1 credit  
Laboratory to accompany ATTR 660; application of theories and skill practice.

**ATTR 662**  
Clinical Examination and Diagnosis-Lower Extremity. 3 credits  
Pathomechanics, clinical examination, diagnosis and appropriate medical referral of orthopedic injuries and other conditions to the lower extremity and spine. Prerequisite: Enrollment in MS athletic training program.

**ATTR 663**  
Clinical Examination and Diagnosis-Lower Extremity Lab. 1 credit  
Laboratory to accompany ATTR 662; application of theories and skill practice. Prerequisite: Enrollment in MS athletic training program. Course includes cadaver lab.

**ATTR 664**  
Clinical Examination and Diagnosis-Upper Extremity. 3 credits  
Pathomechanics, clinical examination, diagnosis and appropriate medical referral of orthopedic injuries and other conditions to the upper extremity, head and cervical spine. Prerequisite: ATTR 662 with a C or better.

**ATTR 665**  
Clinical Examination and Diagnosis-Upper Extremity Lab. 1 credit  
Laboratory to accompany ATTR 664; application of theories and skill practice. Prerequisite: Enrollment in MS athletic training program. Course includes cadaver lab.

**ATTR 666**  
Physical Rehabilitation. 3 credits  
The study of physical rehabilitation theory and techniques used as a therapeutic intervention for orthopedic injuries and conditions. Prerequisite: Enrollment in MS athletic training program.

**ATTR 667**  
Physical Rehabilitation Lab. 1 credit  
Laboratory to accompany ATTR 666; application of theories and skill
practice.  
Prerequisite: Enrollment in MS athletic training program.

**ATTR 668  Therapeutic Modalities. 3 credits**  
A detailed study of modern therapeutic devices used in the treatment and rehabilitation of orthopedic injuries and conditions.  
Prerequisite: Enrollment in MS athletic training program.

**ATTR 669  Therapeutic Modalities Lab. 1 credit**  
Laboratory to accompany ATTR 668; application of theories and skill practice.  
Prerequisite: Enrollment in MS athletic training program.

**ATTR 670  General Medical Conditions and Therapeutic Medication. 3 credits**  
Pathophysiology, assessment, and appropriate intervention and referral for general medical conditions and disabilities; common diagnostic tests and imaging assessment tools including commonly used therapeutic medications.  
Prerequisite: Enrollment in MS athletic training program.

**ATTR 671  Organization and Administration in Athletic Training. 3 credits**  
Organization and administration of athletic training services including financial, human resources, facility, information technology and risk management.  
Prerequisite: Enrollment in MS athletic training program.

**ATTR 672  Professional Preparation and Issues in Athletic Training. 3 credits**  
Knowledge and skills for successful pursuit of athletic training credentials, employment and continuing professional competencies; emphasis on current topics and issues contributing to the professional preparation of athletic training.  
Prerequisite: Enrollment in MS in athletic training program.

**ATTR 673  Manual Therapy in Athletic Training. 2 credits**  
Manual therapy theory and techniques used as a therapeutic intervention for orthopedic injuries and conditions; indications and contradictions for the use of manual therapy; skill development in soft tissue assessment; application of manual and tool assisted techniques.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KINE 601</td>
<td>Reading Research (Research Methods). 3 credits</td>
<td></td>
<td>Instruction in, and development of, research skills through the study of published reports and readings in kinesiology.</td>
</tr>
<tr>
<td>KINE 628</td>
<td>Nutrition in Sports and Exercise. 3 credits</td>
<td></td>
<td>Interaction between nutrition, exercise, and athletic performance: including: biomechanical and physiological aspects of nutrition and exercise; nutrition for training and competition; exercise and oxidant stress; nutritional supplements and ergogenic acids; and, nutritional aspects of body composition and weight control. Prerequisite: Graduate classification; BIOL 320; KINE 433 or approval of instructor.</td>
</tr>
<tr>
<td>KINE 629</td>
<td>Physiology of Strength and Conditioning. 3 credits</td>
<td></td>
<td>Physiological, bio-mechanical, and metabolic aspects of muscular strength and conditioning programs for various athletic and non-athletic populations; review of resistance training based on scientific literature; promote the use of a structured scientific approach in the prescription of progressive resistance training. Prerequisite: Graduate classification, BIOL 320; KINE 433 or approval of instructor.</td>
</tr>
<tr>
<td>KINE 681</td>
<td>Seminar. 1 credit</td>
<td></td>
<td>Reports and discussions of topics of current interest in kinesiology.</td>
</tr>
<tr>
<td>KINE 685</td>
<td>Directed Studies. 2 credits</td>
<td></td>
<td>Directed study of selected problems in athletic training.</td>
</tr>
<tr>
<td>KINE 690S</td>
<td>Theory of Kinesiology (Statistics). 3 credits (S/U)</td>
<td></td>
<td>Theory and design of research problems and experiments in various subfields of the discipline; communication of research proposals and results; evaluation of current research of faculty and students and review of current literature.</td>
</tr>
</tbody>
</table>