Texas A&M University  
Department of Health and Kinesiology  
Master of Science in Athletic Training  
Curriculum Plan  

Courses | Credit Hours  
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**Required Research Core (7 hours):**  
KINE 601 Reading Research (Research Methods) | 3  
KINE 690S Theory of Kinesiology (Statistics) | 3  
KINE 681 Seminar | 1  

**Required Athletic Training Core (53 hours):**  
ATTR 651 Clinical Education I | 2  
ATTR 652 Clinical Education II | 3  
ATTR 653 Clinical Education III | 3  
ATTR 654 Clinical Education IV | 2  
ATTR 655 Clinical Education V | 3  
ATTR 656 Clinical Education VI | 3  
ATTR 660 Prevention and Care of Athletic Injuries | 3  
ATTR 661 Prevention and Care of Athletic Injuries Lab | 1  
ATTR 662 Clinical Examination and Diagnosis-Lower Extremity | 3  
ATTR 663 Clinical Examination and Diagnosis-Lower Extremity Lab | 1  
ATTR 664 Clinical Examination and Diagnosis-Upper Extremity | 3  
ATTR 665 Clinical Examination and Diagnosis-Upper Extremity Lab | 1  
ATTR 666 Physical Rehabilitation | 3  
ATTR 667 Physical Rehabilitation Lab | 1  
ATTR 668 Therapeutic Modalities | 3  
ATTR 669 Therapeutic Modalities Lab | 1  
ATTR 670 General Medical Conditions and Therapeutic Medication | 3  
ATTR 671 Organization and Administration in Athletic Training | 3  
ATTR 672 Professional Preparation and Issues in Athletic Training | 3  
KINE 628 Nutrition in Sports and Exercise | 3  
KINE 629 Physiology of Strength and Conditioning | 3  
KINE 685 Directed Studies | 2  

Total: 60 hours
Course Descriptions

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 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 654  Clinical Education IV. 2 credits
Integration of clinical competencies with classroom instruction and a supervised
field based experience in athletic training to link theory into practice.
Prerequisite: ATTR 653.

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 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 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.

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.

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.

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.
KINE 601  Reading Research (Research Methods)  
Instruction in, and development of, research skills through the study of published reports and readings in kinesiology.

KINE 628  Nutrition in Sports and Exercise. 3 credits  
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.

KINE 629  Physiology of Strength and Conditioning. 3 credits  
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.

KINE 681  Seminar  
Reports and discussions of topics of current interest in kinesiology.

KINE 685  Directed Studies. 2 credits  
Directed study of selected problems in athletic training.

KINE 690S  Theory of Kinesiology (Statistics)  
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.
## Course Sequence

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<th>Summer 1st year (2nd session)</th>
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<td>ATTR 660 Prev and Care of Athl Injuries</td>
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<tr>
<td>ATTR 651 Clinical Education I</td>
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<td>ATTR 668 Therapeutic Modalities</td>
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<td>KINE 681 Seminar I</td>
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<td>KINE 601 Reading Research</td>
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<td>KINE 628 Nutrition in Sports and Exercise</td>
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<td>KINE 690S Theory of Kinesiology (Stats)</td>
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<td>ATTR 666 Physical Rehabilitation</td>
<td>KINE 629 Phys of Strength &amp; Cond</td>
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<td>KINE 685 Directed Studies</td>
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