



THE GEORGE  
WASHINGTON  
UNIVERSITY  
MEDICAL CENTER

**School of Public Health and Health Services**

**Bachelor of Science (BS)  
Athletic Training**

**2010-2011**

**Department of Exercise Science**

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## **Program Director**

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Note: All curriculum revisions will be updated immediately on the website <http://www.gwumc.edu/sphhs/>

## **Introduction**

The George Washington University Medical Center, School of Public Health and Health Services (SPHHS), Department of Exercise Science offers the Bachelor of Science (BS) with a major in Athletic Training, Exercise Science or Public Health. SPHHS also offers several graduate degrees and graduate certificate programs including the Master of Public Health (MPH), Master of Health Services Management and Administration (MHSA), Master of Science with a major in Exercise Science (MS), and the Doctor of Public Health (DrPH).

The Bachelor of Science with a major in Athletic Training provides students with the knowledge, skills, and professional standards associated with successful careers in Athletic Training.

The GW Athletic Training Education Program (ATEP) is nationally accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and is the only such program in Washington, DC.

## **Benefits of the Athletic Training Major**

- Prepares students for a wide variety of employment opportunities including: providing athletic health care for collegiate, high school, and professional athletes, working in a rehabilitation clinic, or working in an industrial setting.
- Affords opportunities to participate in a practicum in a variety of settings including: GW and other NCAA institutions, public and private high schools, professional teams, and clinics.
- Positions students to pursue further study or a career upon graduation.
- Provides graduates of the program with eligibility to take the Board of Certification Examination.

## **Admission Requirements**

Students may apply to the athletic training major after completion of 30 credit hours with a minimum grade-point average of 2.5. Admission into the Athletic Training Education Program is selective and may be contingent upon availability of clinical practicum sites and approved clinical instructors. Students who wish to apply for admission to the major must meet the following requirements: complete the Athletic Training Education Program application; have prior athletic training observation experience; submit a personal essay; complete a personal interview; complete EXSC 50 Emergency Procedures and Safety Skills and EXSC 102 Introduction to Athletic Training with a minimum grade of B in each of the two courses; complete the Technical Standards form; and submit proof (or waiver) of hepatitis B vaccination, MMR vaccinations, and a TB test and proof of having passed a physical exam for the physical tasks involved in athletic training. Students should expect additional expenses due to required practicum travel.

Transfer students must meet all of the above criteria for admission into the Athletic Training Education Program. Transfer credit from other institutions will be evaluated by departmental faculty for acceptance by the School of Public Health and Health Services.

Follow this link to the Athletic Training Web site to view specific Athletic Training Education Program admission requirements: [click here-http://gwumc.edu/exercise/html/athletic/admission.htm](http://gwumc.edu/exercise/html/athletic/admission.htm)

## **Degree Requirements**

All students accepted to the BS with a major in Athletic Training complete 124 credit hours with a minimum 2.5 grade point average (GPA). There are two levels of requirements for the BS with a major in Athletic Training for students to complete: General curriculum requirements and Athletic Training major requirements, including electives. General curriculum requirements are taken by undergraduate students at The George Washington University and are the liberal education components of the BS degree with a major in Athletic Training.

## SCHOOL OF PUBLIC HEALTH AND HEALTH SERVICES

### BACHELOR OF SCIENCE in ATHLETIC TRAINING: 2010-2011

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<b>General Curriculum Courses</b>		
		Credits
Literacy	UW 20	4
Quantitative and Logical Reasoning	STAT 53 and MATH ≥ 020	6
Natural Science	BISC 011 and BISC 012	8
Humanities and Social and Behavioral Sciences	PSYC 001 and SPHR 11, or COMM 40, or COMM 41, or COMM 42 and Two additional approved social behavioral science courses (6 credits) Two approved humanities courses (6 credits)	18
Public Health	PUBH 101 or 102 or 103	3
Writing in Discipline		6
<b>Total GCR</b>		<b>45</b>
<b>Athletic Training Core Courses</b>		
EXSC 050 (2) Emergency Procedures and Safety Skills EXSC 102 (3) Introduction to Athletic Training EXSC 109 (3) Aerobic Exercise Testing and Prescription EXSC 110 (3) Anaerobic Exercise Testing and Prescription EXSC 119 (3) Basic Nutrition EXSC 126 (3) Medical Issues in Athletic Training EXSC 137 (3) Athletic Training Administration EXSC 141W (3) Psychology of Injury and Performance EXSC 142 (3) Exercise & Health Psychology EXSC 145 (3) Working, Stress, and Human Values <b>OR</b> EXSC 146 (3) Stress Management, Burnout, and Human Potential EXSC 151 (3) Kinesiology EXSC 152 (3) Exercise Physiology EXSC 154 (4) Applied Anatomy and Physiology I EXSC 155 (4) Applied Anatomy and Physiology II	EXSC 158 (3) Prevention and Care of Injury EXSC 159 (4) Injury Assessment EXSC 160 (1) Orthopedic Taping and Bracing EXSC 161 (3) Athletic Training Practicum I EXSC 162 (3) Athletic Training Practicum II EXSC 163 (3) Athletic Training Practicum III EXSC 164 (3) Athletic Training Practicum IV EXSC 168 (4) Therapeutic Modalities in Sports Medicine EXSC 169 (4) Therapeutic Exercise in Sports Medicine EXSC 171 (3) Current Issues in Exercise Science	<b>74</b>
<b>Electives</b>		
Planned with Advisor		5
<b>Total Credits</b>		<b>124</b>

**Exercise Science  
Undergraduate Course Offerings  
2010-2011**

ExSc	050	Emergency Procedures and Safety Skills	2	Introduction to common safety principles, predisposing factors and common causes of accidents, injuries, and illnesses. This course includes American Red Cross Professional Rescuer and Automated External Defibrillator certification. Laboratory fee, \$25.
ExSc	101	Topics	1-3	Topic announced in the Schedule of Classes. May be repeated for credit provided the topic differs.
ExSc	102	Introduction to Athletic Training	3	Introduction to the profession of athletic training. Exploration of topics related to athletic training and sports medicine.
ExSc	103	Professional Foundations in Exercise Science	3	Nature, scope, and scientific basis of exercise science: orientation to professional competencies and opportunities.
HLWL	106	Drug Awareness	3	Analysis of the complex role drugs play in contemporary society and the ethical, legal, socioeconomic and health issues that surround their therapeutic and recreational use.
HLWL	114	Personal Health and Wellness	3	A survey of the various components involved in personal health and wellness, such as personal fitness, sexuality, mental health, and environmental health. Emphasis is on application of knowledge through the use of decision-making and behavior modification skills.
ExSc	109	Aerobic Exercise Testing and Prescription	3	The adaptations of human physiological systems to various methods of aerobic exercise. Cardiorespiratory adaptations to endurance exercise training, and how these adaptations provide a prophylaxis to cardiovascular and metabolic disease. Prerequisite: EXSC 50 and EXSC 152
ExSc	110	Anaerobic Exercise Testing and Prescription	3	The adaptations of human physiological systems to various methods of anaerobic training. Neuromuscular adaptations to strength and power training, with a primary focus on athletic populations. Design of training program. Laboratory fee \$40. Prerequisite: EXSC 50 and EXSC 152
ExSc	119	Basic Nutrition	3	The six classes of nutrients, their chemical basis, physiological functions and conversion into useable energy. Nutrient needs across the lifespan.
HLWL	108	Weight and Society	3	Background and concepts of body dissatisfaction, disordered eating, food preoccupation, and exercise obsession.
HLWL	109	Human Sexuality	3	Biological and developmental aspects of human sexuality; psychological and emotional aspects of sexual behavior; sexual identity; social forces affecting sexual issues; and research trends in the area of human sexuality.
ExSc	126	Medical Issues in Athletic Training	3	For Athletic Training majors only. General medical issues and pharmacology as they relate to the profession of athletic training. Laboratory fee, \$40.
HLWL	110	Issues in Alternative Medicine	3	Various Modalities of alternative/complementary/ integrative therapy. Critical analysis and evaluation of the many dimensions of these approaches.

ExSc	134	Sport and Nutrition	3	The nutrition needs for recreational exercise and sports; skills in assessing nutritional needs; development of individual nutrition programs that are sport/activity-specific; and identification and correction of nutrition problems affecting sports performance.
HLWL	111	Sport and the Law	3	Basic principles of the law as they apply to amateur and professional sports. Legal issues and their ramifications.
HLWL	112	Issues in Women's Health	3	An introduction to health promotion and disease prevention pertaining especially to diseases, disorders, and conditions that are more prevalent among or unique to women or for which risk factors or interventions may differ for women and men. Topics are covered from epidemiological, socio-cultural, historical, and behavioral perspectives.
ExSc	137	Athletic Training Administration	3	Standards, policies, and practices of organization, supervision, and administration of athletic training programs.
ExSc	139	Principles of Coaching	3	Study of coach/athlete behavioral patterns and interactions, coaching methods, and interdisciplinary principles applicable to sport coaching.
ExSc	140 W	Sport Psychology	3	Study of the psychological aspects of sport participants, athletes, teams, and competition in sport situations, including personality, motivation, performance level, achievement, and behavioral change strategies, social factors, training events, and measurement techniques. Prerequisite: Psych 001 (Writing in the Discipline – WID Course)
ExSc	141 W	Psychology of Injury and Performance	3	For Athletic Training Majors only. A study of various areas within the behavioral sciences related to the rehabilitation and prevention of injuries and the injured physically active individual. (Writing in the Discipline – WID Course)
EXSC	142	Exercise and Health Psychology	3	The relation of behavioral factors to health and disease. The role of physical activity in the prevention of chronic disease and disability. Health behavior theories and cognitive behavioral approaches to health behavior change.
ExSc	145	Working, Stress, and Human Values	3	Recognition, prevention, and control of stress and the burnout syndrome. A humanistic inquiry into values, attitudes, and stressors associated with various professions. Admission by permission of the instructor. Not offered in 2010-11.
ExSc	146	Stress Management, Burnout, and Human Potential	3	The nature, prevention, and control of the stress and burnout syndrome. Students will design an overall stress management strategy that incorporates achievement of life goal and human potential in a stress-efficient manner. Admission by permission of the instructor. Not offered in 2010-11.
ExSc	151	Kinesiology	3	Analysis of human movement with emphasis on the biomechanics of exercise and sport movement patterns. Prerequisite: EXSC 154 or equivalent, an approved course in anatomy.
ExSc	152	Exercise Physiology I	3	The physiological functions of the body and the effect of exercise on these functions. Prerequisite: EXSC 154 and EXSC 155
ExSc	154 155	Applied Anatomy Physiology I-II	4 4	Fundamentals of human anatomy and physiology for students preparing for health sciences professions. Emphasis on bones, joints, muscles, innervation, and blood supply.

				Laboratory fee: \$40 per semester. EXSC 154 is the prerequisite for EXSC 155.
ExSc	158	Prevention and Care of Injury	3	Information and practical experience in preventing, recognizing, and treating injuries that occur in physically active individuals. Prerequisite: EXSC 050, 154-155 or equivalent.
ExSc	159	Injury Assessment	4	Information and practical experience in the evaluation and assessment of orthopedic and other injuries. Prerequisite: EXSC 158. Laboratory fee: \$40.
ExSc	160	Orthopedic Taping and Bracing	1	Laboratory complement to EXSC 158 required for Athletic Training majors only. Laboratory fee, \$40.
ExSc	161-164	Athletic Training Practicum,	3, 3, 3, 3	For Athletic Training majors only. Practical clinical experience and application of athletic training skills. Laboratory fee: for EXSC 161, \$25; for EXSC 163, \$10; for EXSC 164, \$35.
ExSc	168	Therapeutic Modalities in Sports Medicine	4	Explanation and demonstration of the use of therapeutic modalities on the healing process including discussion of the use of therapeutic modalities to enhance the rehabilitation process after athletic injury. Prerequisite: EXSC 159 or permission of instructor. Laboratory fee: \$40.
ExSc	169	Therapeutic Exercise in Sports Medicine	4	Discussion and application of general rehabilitation techniques to specific athletic injuries, including evaluation, implementation, and follow-up after specific joint injuries, Prerequisite: EXSC 159 or permission of instructor.
ExSc	171	Current Issues in Exercise Science	3	Study of current literature with implications for exercise and sport science specializations; use of library resources and retrieval systems; evaluation of professional competencies. Senior Exercise Science majors only.
ExSc	173	Independent Study	3	For departmental majors only. Provides the student with an opportunity to gain or enhance public health knowledge and to explore an area of interest related to public health research or the delivery and/or administration of health services. Prerequisite: outline of project must be approved prior to registration by project supervisor, program director, and dean's office prior to registration.
ExSc	175	Internship	1-9	For departmental majors. Admission by permission of advisor. Prerequisite: EXSC 154-155 and EXSC 152.
ExSc	184	Workshop	1-3	Topic to be announced in <i>Schedule of Classes</i> . May be repeated for credit with advisor's permission.



School of Public Health and Health Services

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Bachelor of Science (BS) in Athletic Training  
2009-2010

**BS Exercise Students Must Fulfill Degree Requirements**

- ◆ 124 Credits with a cumulative GPA no less than 2.5
- ◆ All General Curriculum Requirements (45 Credits)
- ◆ All Core Exercise Science Requirements (74 Credits)
- ◆ Electives -Planned with Advisor (5 credits)

**General Curriculum Requirements (GCR) – 45 Credits**

- ◆ **Literacy** **4 Credits**
  - UW 20
  
- ◆ **Quantitative and Logical Reasoning** **6 Credits**
  - STAT 053
  - MATH  $\geq$  020
  
- ◆ **Natural Science** **8 Credits**
  - BISC 011, BS 012
  
- ◆ **Humanities and Social & Behavioral Science Courses** **18 Credits**
  - Psych 001
  - And SPHR 011 or COMM 040, or COMM 041 or COMM 042
  - And two additional approved social and behavioral science courses (6 credits)
  - And two approved humanities courses (6 credits)
  
- ◆ **Public Health** **3 Credits**
  - PubH 101 or PubH 102 or PubH 103
  
- ◆ **Writing in the Discipline** **6 Credits**

### Core Exercise Science Requirements – 74 Credits

- ◆ EXSC 050 Emergency Procedures and Safety Skills 2 Credits
- ◆ EXSC 102 Introduction to Athletic Training 3 Credits
- ◆ EXSC 109 Aerobic Exercise Testing and Prescription 3 Credits
- ◆ EXSC 110 Anaerobic Exercise Testing And Prescription 3 Credits
- ◆ EXSC 126 Medical Issues in Athletic Training 3 Credits
- ◆ EXSC 134 Sport and Nutrition 3 Credits
- ◆ EXSC 137 Athletic Training Administration 3 Credits
- ◆ EXSC 141W Psychology of Injury and Performance 3 Credits
- ◆ EXSC 142 Exercise and Health Psychology 3 credits
- ◆ EXSC 145 Working, Stress, and Human Values **OR** 3 Credits
- ◆ EXSC 146 Stress Management, Burnout, and Human Potential 3 Credits
- ◆ EXSC 151 Kinesiology 3 Credits
- ◆ EXSC 152 Exercise Physiology I 3 Credits
- ◆ EXSC 154 Applied Anatomy and Physiology I and Lab 4 Credits
- ◆ EXSC 155 Applied Anatomy and Physiology II and Lab 4 Credits
- ◆ EXSC 158 Prevention and Care of Injury 3 Credits

### Core Exercise Science Requirements Continued

- ◆ EXSC 159 Injury Assessment 4 Credits
- ◆ EXSC 160 Orthopedic Bracing and Taping 1 Credit
- ◆ EXSC 161 Athletic Training Practicum I 3 Credit
- ◆ EXSC 162 Athletic Training Practicum II 3 Credit
- ◆ EXSC 163 Athletic Training Practicum III 3 Credit
- ◆ EXSC 164 Athletic Training Practicum IV 3 Credit
- ◆ EXSC 168 Therapeutic Modalities in Sports Medicine 4 Credits
- ◆ EXSC 169 Therapeutic Exercise in Sports Medicine 4 Credits
- ◆ EXSC 171 Current Issues in Exercise Science 3 Credits

### Electives – 5 Credits

Plan with Advisor