

CERTIFICATION REQUIREMENTS INCLUDING TEACHER EDUCATION  
PROGRAM OBJECTIVES FOR THE ATHLETIC TRAINER  
ENDORSEMENT ON A PROVISIONAL PROFESSIONAL CERTIFICATE

Purpose

The purpose of the athletic trainer program objectives and certification regulations policy is to provide direction to institutions of higher education in the development of programs for the professional development of athletic trainers leading to certification.

ATHLETIC TRAINER PROGRAM OBJECTIVES

The athletic training curriculum shall provide learning experiences which will enable this individual to:

PROGRAM OBJECTIVES

Anatomy of the Body

1. Identify and locate skeletal structures and musculo-skeletal articulations. (An)\*
2. Identify, locate, and classify the principal muscles and muscle groups of the body. (An)
3. Identify, locate, and describe the major ligaments of the body. (Cm)
4. Trace and describe the structure of neural, respiratory, circulatory, and digestive systems of the human body. (Cm)

Physiological Processes

5. Identify and describe the functional interrelationships among the nine physiological systems of the body. (An)

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\* Letter in parenthesis indicates level of taxonomy at which the objective is expected to be achieved:

In the Cognitive Domain: Kn-Knowledge, Cm-Comprehension, Ap-Application, An-Analysis, Sy-Synthesis, Ev-Evaluation (Adapted from Bloom et al.)

In the Affective Domain: Rc-Receiving, Rs-Responding, Va-Valuing, Or-organization, and Cv-Characterization by a value or value complex (Adapted from Krathwohl et al.)

In the Psychomotor Domain: Rm-Reflex Movements, Fm-Fundamental Movement, Pc-Perceptual Ability, Ps-Physical Ability, Sm-Skilled Movement, Ec-Expressive Communication (Adapted from Harrow)

6. Analyze the physiology of muscular contraction. (An)
7. Analyze the function and importance of circulation in the human body. (An)
8. Analyze the function and importance of the respiratory system in the human body. (An)

#### Principles of Body Mechanics

9. Analyze the principles of physics and mechanics related to human movement and their effects on outside objects, projections and projectiles. (An)
10. Analyze the relationship between body movement and various psychomotor skills in specific sports, including the identification of primary muscles and joints involved. (An)

#### Effects of Physical Training

11. Analyze the bodily systems with respect to stress incurred in athletics. (An)
12. Discuss the implications of fatigue related to injuries. (An)
13. Plan an appropriate physical training program, including pre season, in season and off season conditioning program. (Sy)
14. Support and encourage the implementation of appropriate physical conditioning programs. (Va)

#### Symptoms of Injuries and Sudden Illness

15. Describe and explain signs and symptoms related to common injuries and illnesses. (Cm)
16. Respond to objective and subjective stimuli related to common injuries and illnesses. (Rc)
17. Describe evaluation techniques for the ankle, foot, knee, thigh, hip, abdomen, shoulder, elbow, arm, wrist, hand, chest, neck, and back to determine the amount of disability. (Ap)
18. Apply appropriate evaluation techniques for the ankle, foot, knee, thigh, hip, abdomen, shoulder, elbow, arm, wrist, hand, chest, neck, and back to determine the amount of disability. (Sm)

#### Effects of Nutrition

19. Describe the chemical digestion of foods and the absorption and transportation of digested materials. (Cm)
20. Explain the role of vitamins, minerals, and fluids on athlete's performance. (Cm)

21. Analyze caloric expenditure related to athletic performance. (An)
22. Design basic menus and a diet for athletes. (Sy)
23. Explain the role of pre-event nutrition. (Cm)
24. Describe basic nutrition as it relates to determination of body composition. (Cm)
25. Explain the importance of fluid balance and electrolyte replacement in athletes. (Cm)
26. Encourage sound nutritional practices on the part of athletes. (Va)

#### Effects of Medication

27. Identify physiological and psychological effects of various medications. (Kn)
28. Identify the effect of non-prescription medications and common prescription medications on various injuries and illnesses. (Kn)

#### Mechanisms of Athletic Injuries

29. Describe the mechanism of common injuries in each sport. (Kn)
30. Evaluate athletic activities with respect to injury prevention. (Ev)

#### Program Administration

31. Plan an athletic training facility. (Sy)
32. Prepare an equipment and supplies order as per budget. (Ev)
33. Identify records needed to record athletic injuries and describe a plan to maintain and use such records. (Sy)
34. Develop and implement policies related to the team physician, ambulance service, and area hospital. (Sy)
35. Develop and implement a policy related to the distribution of non-prescription medications. (Sy)

#### Psychological Differences Between Athletes

36. Recognize and apply knowledge of psychological differences between male and female coaches and athletes. (Ap)
37. Recognize and apply knowledge of individual differences in team sport and individual and dual sport coaches and participants. (Ap)
38. Accept individual differences between and among athletes and coaches. (Rc)

### Health Habits

39. Describe and recognize presence of personal and school health habits conducive to maximum athletic performance. (Cm)
40. Describe and recognize the effects of drug and alcohol abuse by athletes. (Cm)
41. Recognize and respond to evidence of personal and school health habits (including use of drugs and alcohol) not conducive to maximum athletic performance. (Rc)

### Care for Acute Injuries

42. Demonstrate knowledge of proper care for acute injuries to the following body areas: ankle, foot, knee, thigh, hip, shoulder, elbow, arm, waist, hand, chest, neck, head, abdomen, and back. (Ap)
43. Apply proper care for acute injuries to the following body areas: ankle, foot, knee, thigh, hip, shoulder, elbow, arm, waist, hand, chest, neck, head, abdomen, and back. (Sm)
44. Demonstrate knowledge of indications for and application of Cardiopulmonary Resuscitation (CPR). (Ap)
45. Demonstrate proper procedures for Cardiopulmonary Resuscitation (CPR). (Sm)
46. Describe the principles of fitting and using crutches. (Cm)
47. Demonstrate the ability to fit and instruct others in the use of crutches. (Ps)
48. Describe proper asepsis for wound management. (Ap)
49. Demonstrate proper asepsis for wound management. (Pc)

### Care for Chronic Conditions

50. Demonstrate the knowledge of proper care for chronic conditions of the ankle, foot, knee, thigh, hip, shoulder, elbow, arm, waist, hand, neck, and back. (Ap)
51. Apply proper care for chronic conditions of the ankle, foot, knee, thigh, hip, shoulder, elbow, arm, waist, hand, neck, and back. (Sm)

### Support for Athletic Activity

52. Demonstrate knowledge of the proper support for athletic activity (dressing, taping, bandage, splint, brace, etc.) for injuries to the ankle, foot, knee, thigh, hip, shoulder, elbow, arm, wrist, hand, chest, neck, and back. (Sy)

53. Apply proper support for athletic activity (dressing, taping, bandage, splint, brace, etc.) for injuries to the ankle, foot, knee, thigh, hip, shoulder, elbow, arm, wrist, hand, chest, neck, and back. (Sm)

#### Protective Equipment

54. Demonstrate knowledge of principles of making and applying protective pads for injuries to any part of the body as indicated. (Sy)
55. Design and apply protective pads for injuries to any part of the body as indicated. (Sm)

#### Plan Emergency Care

56. Design a plan to care for emergency athletic situations to include prior arrangements, equipment, and transportation. (Sy)

#### Process of Healing

57. Describe the processes of normal soft tissue, nerve and bone healing and repair, and identify factors which interfere with the process. (Cm)

#### Administering Therapeutic Modalities

58. Explain the underlying physics, physiological effects, indications, and contraindications for applying heat lamps, massage, contrast bath, whirlpools, ice packs, ice massage, ice immersion, and moist heat. (Ap)
59. Perform current techniques for applying heat lamps, massage, contrast bath, whirlpools, ice packs, ice massage, ice immersion, and moist heat. (Pc)
60. Explain the underlying physics, physiological effects, indication, contraindication for shortwave diathermy, microwave diathermy, ultrasound, faradic and galvanic stimulation, traction, and paraffin. (Cm)

#### Research

61. Interpret and apply research related to sports medicine. (Ap)
62. Augment athletic training practice with attention to current research findings. (Rs)

#### Rehabilitation Techniques

63. Demonstrate the ability to design and/or select appropriate rehabilitation programs for each area of the body for strength, endurance, flexibility and agility. (An)

64. Apply appropriate rehabilitation programs for each area of the body for strength, endurance, flexibility, and agility. (Ps)

#### Physical Disabilities

65. Use knowledge of physiological, sociological and psychological characteristics of individuals with physical disabilities who participate in athletics. (Ap)
66. Respond to the physiological, sociological, and psychological effects of individuals with physical disabilities who participate in athletics. (Rs)

#### Professional Association

67. List and describe the professional associations closely associated with athletic training. (Kn)
68. Support the goals and objectives of athletic training as a professional endeavor. (Va)

#### Legal Aspects of Athletic Training

69. Describe the problem of legal liability as it relates to school safety and first aid. (Ap)
70. Identify and describe medical and legal liability issues related to treating athletic injuries. (Ap)
71. Practice appropriate medical/legal protocol of student athlete health care. (Rs)

#### Ethical Practices in Athletic Training

72. Critically examine ethical practices related to the athletic training profession. (Ev)
73. Conduct athletic training practice and behavior in an ethical manner. (Cv)

#### Medical Reference System

74. Demonstrate proper use of the medical referral system. (Ap)

#### Evaluating Protective Equipment

75. Demonstrate how to evaluate protective equipment for each sport as to its appropriateness, purchase, fit, and maintenance. (Ev)
76. Demonstrate the ability to appropriately fit and maintain protective equipment for each sport. (Pc)

\* PROFESSIONAL OBJECTIVES

Growth and Development Patterns

77. Identify and apply knowledge of physical, mental, social, and emotional characteristics of different age groups, giving particular attention to middle childhood and adolescent athletes. (Ap)
78. Prescribe appropriate physical activities based on varying growth and development characteristics. (Ev)

School Environment

79. Utilize knowledge of the school environment in the role of the athletic trainer. (Ap)
80. Comply with goals and objectives of the school. (Rs)

Learning Principles

81. Identify and apply basic principles of learning related to emotional, social, mental and physical growth and development circumstances of the middle childhood and adolescent athlete. (Ap)
82. Support the emotional, social, mental, and physical growth and development aspects of athletic participation at the middle childhood and adolescent levels. (Va)

THE PROFESSIONAL SERVICE CERTIFICATE ISSUED PROVISIONALLY

Completion of a state-approved athletic training program including:

Athletic Trainer	(1)
General Studies	40
Professional Education	(2)

1. Must complete the institution's approved program component in athletic training showing evidence of satisfactory attainment of program objectives 1-82.
2. Culminating Clinical Experience only; minimum eight weeks full time experience in which the student must demonstrate proficiency as an

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\* If an individual is completing an additional teaching field, these objectives may already be met through the existing professional education component.

athletic trainer in skills related to program objectives. Athletic trainer in combination with a 1-6 or 7-12 teaching field requires a minimum four weeks full time culminating clinical experience in athletic training and a minimum four weeks full time culminating clinical experience in the teaching field. Athletic training in combination with a K-12 teaching field requires a minimum four weeks full time culminating clinical experience in athletic training in addition to the minimum eight weeks full time culminating clinical experience required for K-12 fields.

Z/BD3 - 6/10/83





No.	EFFECTS OF NUTRITION					MEDICATIONS					MECHANISMS					PROGRAM ADMINISTRATION					PSYCHOLOGICAL DIFFERENCES					HEALTH HABITS					ACUTE INJURY CARE					CHRONIC				
	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53									
1.	Cm	Cm	Cm				Kn	Ev		Sy	Sy	Sy				Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm	Sm											
2.	Cm	Cm	Cm	Va			Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
3.	Cm	Cm	Cm	Va	Kn		Kn	Ev	Sy	Ev	Sy	Sy	Sy				Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
4.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
5.							Kn	Ev			Sy	Sy					Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
6.							Kn	Ev			Sy	Sy					Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
7.	Cm	Cm	Cm	Va	Kn		Kn	Ev	Sy	Ev	Sy	Sy	Sy	Ap	Ap	Rc	Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
8.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
9.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
10.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
11.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
12.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
13.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
14.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
15.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
16.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
17.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
18.	Cm	Cm	Cm	Va	Kn		Kn	Ev	Sy	Ev	Sy	Sy	Sy	Ap	Ap	Rc	Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
19.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
20.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
21.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											
22.							Kn	Ev									Cm	Cm	Rc	Ap	Sm	Ap	Sm		Ap	Ps	Ap	Ap	Sm											

Legend for proficiency level required by objective as it relates to the specific function.  
 Kn - Knowledge Cm - Comprehension Ap - Application An - Analysis Sy - Synthesis Ev - Evaluation  
 Rc - Receiving Rs - Responding Va - Valuing Or - Organization Cv - Characterization by Value  
 Em - Reflex Movement Fm - Fundamental Movement Pc - Perceptual Abilities Ps - Physical Abilities Sm - Skilled Movement Ec - Expressive Communication

