

University Council Athens, Georgia 30602

October 2, 2009

UNIVERSITY CURRICULUM COMMITTEE - 2008-2009

Mr. David E. Shipley, Chair

Agricultural and Environmental Sciences - Dr. Timothy L. Foutz

Arts and Sciences - Dr. Roxanne Eberle (Arts)

Dr. Rodney Mauricio (Sciences)

Business - Dr. James S. Linck

Ecology - Dr. James W. Porter

Education - Dr. Yvette Q. Getch

Environment and Design - Mr. Scott S. Weinberg

Family and Consumer Sciences - Dr. Jan M. Hathcote

Forestry and Natural Resources - Dr. Sarah F. Covert

Journalism and Mass Communication - Dr. Wendy A. Macias

Law - No representative

Pharmacy - Dr. Keith N. Herist

Public and International Affairs - Dr. Anthony M. Bertelli

Public Health - Dr. Phaedra S. Corso

Social Work - Dr. Patricia M. Reeves

Veterinary Medicine - Dr. K. Paige Carmichael

Graduate School - Dr. Malcolm R. Adams

Undergraduate Student Representative - Cameron Secord

Graduate Student Representative - Robert Shostak

Dear Colleagues:

The attached proposal for a new major in Athletic Training (B.S.Ed.) will be an agenda item for the October 9, 2009, Full University Curriculum Committee meeting.

Sincerely,

David E. Shipley, Chair

University Curriculum Committee

cc:

Dr. Arnett C. Mace, Jr.

Professor Jere W. Morehead



College of Education Department of Kinesiology

TO:

David Shipley, Chair

University Curriculum Committee

FROM:

Kirk Cureton, Head Kirk Remetor Department of Kinesiology

RE:

Proposal for a new undergraduate major in Athletic Training

under the B.S.Ed. degree

DATE:

October 23, 2009

Attached is a revised proposal for a new undergraduate major in Athletic Training under the B.S. Ed. degree to be offered in the Department of Kinesiology. This proposal is being submitted at this time because the national accrediting organization for athletic training programs, the Commission on Accreditation of Athletic Training Education (CAATE), found the UGA athletic training education program to be non-compliant for not being an academic major at the institution. This is a new requirement that we must meet if the program is to remain accredited.

This program is currently an area of emphasis under the exercise and sport science undergraduate major. Only minor deviations from the current curriculum are being proposed. However, the credit associated with the required clinical education courses (KINS 3910, 3920, 4910, 4920) has been increased from 1 to 3 hours to provide appropriate credit for these field experiences (~ 5 contact hours/credit hour). Due to the large clinical educational component, and many competencies and skills that must be taught in the curriculum to meet accreditation standards, a 126-hour major is proposed. Because the faculty and courses for this program are in place, no new resources are required for the major.

The athletic training program is in high demand by students, has exceptional faculty and has an established record of educational excellence. The Kinesiology faculty voted unanimously in support of establishing the new major. The proposal has my unqualified support.

Thank you for your assistance.

New Program Proposal Major in Athletic Training

Institution:	The University of Georgia
Date:	March 2009
College:	Education
Department:	Kinesiology
Name of Proposed Program:	Major in Athletic Training
Degree:	Bachelor of Science in Education
Major:	Athletic Training
CIP Code:	31.0503
Starting Date:	Fall 2010

Table of Contents

		Page No.
1.	Program Description and Objectives	3
2.	Justification and Need for the Program	5
3.	Procedures Used to Develop the Program	8
4.	Curriculum	9
5.	Inventory of Faculty Directly Involved	16
6.	Outstanding Programs of this Nature in Other Institutions	21
7.	Inventory of Pertinent Library Resources	21
8.	Facilities	22
9.	Administration	23
10.	Assessment	23
11.	Accreditation	24
12.	Affirmative Action Impact	24
13.	Degree Inscription	25
14.	Fiscal and Enrollment Impact, and Estimated Budget	25
15.	Appendix A	26
16.	Appendix B	45
17.	Appendix C	108

Program Description and Objectives

The athletic training education program (ATEP) at the University of Georgia (UGA) was started in 1998 and became fully accredited since 2001. The mission of the athletic training education program is to be a national leader in providing superior educational, clinical and research services utilizing state-of-the-art information and technology in a professional and ethical manner. Specifically, the goals of the program are to:

- 1. Educate students in the care and prevention of athletic injuries at a level consistent with passing the national Board of Certification Examination.
- 2. Promote ethical and professional conduct at all times.
- 3. Provide outstanding clinical experiences in a variety of clinical settings to enhance student learning.
- 4. Provide the student with current information and trends in sports medicine.
- 5. Promote professionalism.
- 6. Promote contribution to community activities in a variety of events.
- 7. Provide experiences in research to gain a further understanding of topics in sports medicine.
- 8. Become recognized as a global leader in sports medicine and athletic training.

The primary objective of the athletic training education program is to prepare athletic training professionals for the work force with a level of proficiency consistent with passing the national certification examination given by the Board of Certification (BOC) Examination. The national certification examination is comprised of assessing multiple skills needed to function as an entry-level athletic trainer to include didactic knowledge and clinical decision making. Since implementing the program in 1998, UGA has a very high success passing rate on passing this examination.

The academic curriculum includes the following cognitive domains: 1. Risk Management and Injury Prevention, 2. Pathology of Injuries and Illness, 3. Assessment and Evaluation, 4. Acute Care of Injuries and Illnesses, 5. Pharmacology, 6. Therapeutic Modalities, 7. Therapeutic Exercise, 8. General Medical Conditions and Disabilities, 9. Nutritional Aspects of Injury and Illness, 10. Psychosocial Intervention and Referral, 11. Health Care Administration, 12. Professional Development and Responsibilities. The Joint Review Committee-Athletic Training (JRC-AT) developed the educational competencies and clinical proficiencies that all accredited programs must use in planning, structuring and implementing athletic training curricula.

The job market is favorable for graduates of the athletic training program with less than 10% of the high schools that have a certified athletic trainer. The athletic training program develops athletic training professionals to provide health care services to the secondary school athlete. The combination of teacher education plus a major in athletic training makes students very marketable and employable. Further, students have been placed in a variety of health care settings in Georgia, including sports medicine centers and hospitals. Also, a number of students have chosen to pursue advanced degrees in athletic training or related fields, and students have also been accepted to medical, physical therapy and physician-assistant schools.

Recently (October 8, 2008), the Commission on Accreditation of Athletic Training Education (CAATE) found the UGA Athletic Training Education Program to be non-compliant for not being an academic major at the institution. Specifically, the CAATE standard states:

- I1. **Description of the Program** The athletic training education program must be an undergraduate or graduate program that offers a major or graduate equivalent in athletic training. The undergraduate major or graduate major equivalent must be:
 - I1.1 consistent with other majors offered within the institution
 - I1.2 identified as an academic athletic training major program in institutional academic publications, and
 - I1.3 indicated on the official transcript of the student as is normally designated for other undergraduate majors or graduate major equivalents at the institution.

Rationale for Non-Compliance:

Upon review of the Annual Report submission for 2007-2008 academic year, the notation for athletic training on the student transcript and the university publications do not identify the ATEP as an undergraduate program that offers a major/degree designation in athletic training. The major is listed on the transcript and the supporting documentation as a BSEd in Exercise and Sport Science with an emphasis in Athletic Training.

To demonstrate compliance with the Standard, the Program must submit the following evidence:

- Please provide a listing of all academic majors at the institution that include Athletic Training.
- Also, please provide an official University document that describes how academic majors are determined at the institution.
 - If this document does not exist, provide a description of major identification, signed and dated by the Dean or registrar.
 - Should the major/degree in Athletic Training be approved, provide a copy of a student transcript, with last name [only] of the student deleted, to document the new major in Athletic Training.
- Please provide a copy of a student transcript indicating Athletic Training is the student's major.
 - Please delete the student's last name [only], as well as any identifying information (e.g. social security number, birthdate).

OR

Please provide an update on the progress made toward obtaining a major in Athletic Training and provide evidence, signed and dated by the Program Director.

Further, the standards also states: "By 2014-2015 academic year, individuals completing entry-level programs in athletic training must be awarded a degree in athletic training". This proposal for an athletic training major at the University of Georgia has been developed to meet this standard to ensure the athletic training program remains in compliance and maintains its national accreditation status.

Implementation of the proposed Athletic Training major in the Department of Kinesiology will not require additional financial or physical resources because the instructional program already exists as an area of emphasis within the Exercise and Sport Science major. The faculty, instructional resources and facilities are in place to provide superior academic and clinical education for the student. Financial support for the program is currently included within the operational budget of the College of Education and the Department of Kinesiology. The program graduates approximately 20 students per year.

Justification and Need for the Program

- 1. Need for Graduates of the Program: Currently in the state of Georgia, there is a critical shortage of health care practitioners. This has been declared by the Governor and recognized by the Board of Regents. Certified Athletic Trainers licensed by the state are able to provide much needed health care in this area of critical shortage. Working as physician extenders, in rehabilitation clinics and high schools, licensed athletic trainers are able to provide valuable health care services to the communities and various patient populations in the state. Further employment potential exists in professional and intercollegiate/interscholastic sport settings and in clinical/hospital/sports medicine settings. In addition, a new area of employment for certified athletic trainers is in the military and the corporate/industrial settings. For example, many companies have recently hired several certified athletic trainers for inhouse prevention and care of orthopedic injuries of workers and found that the certified athletic trainer was able to provide effective care at a reasonable cost. The greatest need for graduates of the athletic training program is in the secondary schools. Currently, fewer than 5% of all Georgia high schools employ a full-time certified athletic trainer. Lastly, there is a dearth of certified athletic trainers with doctoral degrees to assume roles in research and the academic preparation of students.
- 2. **Student Demand for the Program:** Student demand for the athletic training program at UGA has been excellent since its inception. The athletic training education program directly receives numerous inquiries annually about the program and admission policies from prospective students. Further, the athletic training web site averages approximately 15,000 hits per month. From these numbers, we usually average 70 students enrolled in the pre-athletic training practicum course annually. Finally, we typically accept between 15-20 students annually for positions in the program. Over 94% of the students who have enrolled in the program have been from Georgia. The average GPA for athletic training students enrolled in the program has been a consistently high 3.32 with minority and international students accounting for approximately 12% of the total students enrolled. Further, UGA will be the only Research 1 and NCAA Division IA University in the State to offer this academic program.
- 3. **Additional Reasons the Program is Desirable:** There is a strong foundation at the undergraduate level for the proposed new major in athletic training. In the 2002 revised CAAHEP standards and guidelines for athletic training programs, Section

II,A,1,a states, "The athletic training curriculum shall be an undergraduate academic major or graduate degree program in athletic training as defined by the sponsoring institution. The institution and institutional governing body requirements for a major shall be met." Then in 2006 the Commission on Accreditation of Athletic Training Education (CAATE) further revised this standard to state in Section I1. Description of the Program – The athletic training education program must be an undergraduate or graduate program that offers a major or graduate equivalent in athletic training. Further stated by CAATE is, "By 2014-2015 academic year, individuals completing entry-level programs in athletic training must be awarded a degree in athletic training." This proposal for an athletic training major and degree at the University of Georgia has been developed to meet this standard to ensure the athletic training education program remains in compliance and maintains its accreditation status. The only path for a student to become a licensed athletic trainer in Georgia is to complete a program of study at an accredited institution. Currently, there are only four other programs that have this accreditation in Georgia (Georgia College and State University, Valdosta State University, North Georgia College, and Georgia Southern University).

4. Reports of Advisory Committee: The ATEP has undergone two accreditation reviews and both reviews cited the strengths of the academic and clinical education components of the program. The athletic training education program also has enjoyed strong and enthusiastic support from the UGA Athletic Association due to the clinical component where administrators and coaches have commented on the improved health care services provided to their athletes since the inception of the program. The program will continue to maintain its high quality and visibility due to the clinical opportunities available with the UGA Athletic Association, a visible research agenda particularly with concussion in sports and an outstanding and dedicated staff of professors and clinical instructors.

Supporting Statements by the Accreditation Team: The athletic training education program (ATEP) was cited for the following strengths by the external CAAHEP accreditation team in 2005. In fact, the UGA ATEP was granted a 7-year accreditation period due to its superior record which was 2 years beyond the typical accreditation period granted most programs.

- 1. The Program Director (Dr. Michael Ferrara) has a tremendous amount of administrative, teaching and research experience. This experience has allowed the development of a very strong athletic training education program. He is dedicated and motivated to the education of athletic training students.
- 2. The administrative support from the Department, Dean and Provost is very strong. Facilities, equipment and supplies are exceptional. The Medical Director and Team Physician's involvement in the clinical and didactic components of the program are to be commended. They are both highly interested in the professional growth and development of the students in the ATEP.

- 3. The relationship between the athletic department and the ATEP is exceptional and allows students to gain valuable clinical experience with a high level intercollegiate program. The athletic training staff is committed to providing high quality educational experiences to the students.
- 4. The communication among all parties involved in the ATEP is very good. The athletic training students have established themselves as quality students in the classroom.

In the 2000 accreditation report, the following strengths were cited by the accreditation team:

- 1. The program enjoys universal support from the administration both academic and athletic and this is a primary strength of the program. All individuals could articulate the program goals and identified a desire to establish a high quality, noteworthy program.
- 2. The program owes its strong beginning to the Director of Sports Medicine, Ron Courson, who initiated the process to seek accreditation several years ago. Using start-up monies solicited from the community, the program began with sound financial support that the administration is committed to maintaining.
- 3. Dr. Mike Ferrara, the program director, has firmly established himself as a creditable and contributing member of the academic community in a short period of time. Faculty, administrators and clinical instructors routinely note his positive contributions. Dr. Ferrara and Mr. Courson communicate in an effective manner that clearly enhances program development, delivery and evaluation.
- 4. The clinical instructors are another strength of the program. They are uniformly interested in clinical education, supportive of the program and value sharing their expertise. The overwhelming majority of the students acknowledged their clinical instructors as positively impacting their clinical experience, both in terms of availability and approachability.
- 5. Physician involvement during each student's clinical education is prevalent. Students have multiple opportunities to interact with general medicine and orthopedic physicians. Team physicians Drs. Elliott and Reifsteck demonstrate a sincere interest in athletic training education, are involved in didactic instruction and engage students daily in the athletic training room. Both were involved throughout the self-study process.
- 6. KINS 4130 (previously EXRS 2130), Athletic Training Emergency Care, was routinely cited by students as an outstanding course. Emergency planning and preparedness is emphasized throughout the academic and clinical experiences.

- 7. Resources available to facilitate learning are excellent. The library is accessible and provides ample resources for students doing research. The athletic training rooms at the University of Georgia are fully equipped with modern equipment. The Nova Care Athletic Training Education and Research Laboratory provides additional equipment and practical skills laboratory space.
- 5. Public and private institutions that offer the program in Georgia: Valdosta State University offers a Bachelor of Science with a Major in Sports Medicine/Athletic Training, Georgia College and State University offers a Bachelor of Science with a major in Health Education: Athletic Training, North Georgia College and University offers a Bachelor of Science in Athletic Training, and Georgia Southern University offers a Bachelor of Science in Kinesiology with an emphasis in Athletic Training. All of these Universities have CAATE-accredited undergraduate athletic training programs.

Procedures used to Develop the Program

The athletic training program was developed as an area of emphasis within the Exercise and Sport Science Major in the Department of Exercise Science in 1998. To meet future accreditation requirements, it has become necessary to develop an academic major in Athletic Training at the University of Georgia. The proposed academic major in Athletic Training meets the academic and clinical requirements for an athletic training education program as required by CAATE (Appendix A) and the companion document, the 4th Edition of the Athletic Training Educational Competencies (2006) (ATEC) (Appendix B). The ATEC lists the cognitive and psychomotor competencies and the clinical proficiencies for the twelve (12) major content areas. The content areas are:

- 1. Risk Management and Injury Prevention
- 2. Pathology of Injuries and Illnesses
- 3. Assessment and Evaluation
- 4. Acute Care of Injury and Illness
- 5. Pharmacology
- 6. Therapeutic Modalities
- 7. Therapeutic Exercise
- 8. General Medical Conditions and Disabilities
- 9. Nutritional Aspects of Injury and Illness
- 10. Psychosocial Intervention and Referral
- 11. Health Care Administration
- 12. Professional Development and Responsibilities

Each of these major areas of study includes required materials for the cognitive, psychomotor and affective domains plus required clinical proficiencies. In total, there are more than 1,200 clinical competencies and proficiencies that must be taught and tested in the curriculum. Further, we evaluated other athletic training programs offered at similar institutions, and received

feedback from focus groups of students and faculty regarding academic content and clinical proficiencies. The data was then reduced and synthesized to develop the athletic training education program, didactic and clinical curriculum which formed the basis for the proposal for the athletic training major.

Curriculum

The Athletic Training major will be located in the College of Education in the Department of Kinesiology. The Athletic Training major will have prerequisite requirements similar to those of the Exercise and Sport Science major. Admission to the proposed Athletic Training major will be selective and high-demand status will be requested. The following are the proposed admission requirements for the major:

Admission Requirements

- 1. Overall GPA of 2.5 or better
- 2. Completion of Courses in Area I-IV
- 3. Completion of Area VI courses (CHEM 1211 and CHEM 1211L, CHEM 1212 and 1212L, CBIO 2200-2200L, CBIO 2210-2210L, PHYS 1111-1111L)
- 4. Completion of KINS 2100 and KINS 2100L, Prevention and Care of Athletic Injuries
- 5. Completion of KINS 2010, Introduction to Kinesiology
- 6. Completion of KINS 2470, Practicum in Athletic Training
- 7. Completion of Athletic Training Application for Admission.
- 8. Interview with members of the selection committee. The selection committee is comprised of at least one athletic training educator, clinical instructor(s) and student(s) enrolled in the program.

Evaluation of Applications for Athletic Training Major-High Demand Status

We have developed a systematic process for the evaluation of all applications to the athletic training major and one that is similar to that currently employed in the Exercise and Sport Science Major. The Athletic Training Major will use the same high-demand status scoring rubric that has been previously approved for the Exercise and Sport Science Major. These are:

- 1. UGA Core Areas I-IV=10%
- 2. UGA Core Area VI=60%
- 3. Grades in KINS 2100 and KINS 2100L and KINS 2010 10%
- 4. Essay and Interview=20%

A rank order for the candidates is developed from these scores and then student admission decisions are made for the athletic training major.

The four-year curriculum for the athletic training major would encompass courses in the UGA core curriculum, Area VI courses, Major requirements and Major electives as follows:

Athletic Training Major Department of Kinesiology College of Education

Program Requirements

Core Curriculum I-VI 60 hours
Major Requirements 66 hours
Total Credit Hours 126 hours

I. Foundation Courses (9 hours)

ENGL 1101

ENGL 1102

ENGL 1102E

ENGL 1102M

ENGL 1050H

ENGL 1060H

MATH 1113 or higher

II. Sciences (7-8 hours)

Physical Sciences (3-4 hours)

Preferred Course PHYS 1112-1112L

Life Sciences (3-4 hours)

Preferred Course BIOL 1107-1107L

III. Quantitative Reasoning (3-4 hours)

Preferred Course STAT 2000

IV. World Languages and Culture, Humanities and the Arts (12 Hours)

World Languages and Culture (9 hours)

No preferred courses for this area. See core curriculum view.

Humanities and the Arts (3 hours)

Preferred Course PHIL 2020

V. Social Sciences (9 hours)

- Students who have not met the Georgia and U.S. Constitution requirement by examination should enroll in POLS 1101.
- A passing grade on an examination on the history of the United States and Georgia is required to satisfy the United States and Georgia History Requirement for all persons receiving a baccalaureate degree from the University, unless exempted by one of the following courses: <u>HIST 2111</u>, <u>HIST 2112</u>. Examinations are given to freshmen during

orientation and twice each semester by the History Department. Reexamination is permitted. Examination dates are announced in the *Schedule of Classes*.

Required Course PSYC 1101

Area VI Courses

Course Number	<u>Credits</u>	<u>Title</u>
CHEM 1211, 1211L	4	Freshman Chemistry I
CHEM 1212, 1212L	4	Freshman Chemistry II
CBIO 2200-2200L	4	Anatomy and Physiology I
CBIO 2210-2210L	4	Anatomy and Physiology II
PHYS 1111-1111L	4	Introductory Physics-Mechanics,
		Waves, Thermodynamics

Major Requirements

Course Number	Credits	<u>Title</u>
KINS 2010	3	Introduction to Kinesiology
KINS 2100, KINS 2100L	4	Prevention and Care of Athletic Injuries
KINS 2470	1	Practicum in Athletic Training
KINS 3100	3	Recognition and Evaluation of Athletic Injuries I
KINS 3200	3	Recognition and Evaluation of Athletic Injuries II
KINS 3240	3	General Medical Conditions in Athletic Training
KINS 3115E	3	Structural Kinesiology
KINS 3750	3	Motor Skill Behavior
KINS 3910	3	Clinical Experience in Athletic Training I
KINS 3920	3	Clinical Experience in Athletic Training II
KINS 4100	3	Therapeutics I in Athletic Training
KINS 4110	4	Therapeutics II in Athletic Training
KINS 4120	3	Administration of Sports Medicine
KINS 4130	3	Athletic Training Emergency Care
KINS 4200, KINS 4200L	4	Biomechanics
KINS 4300/6300	3	Exercise Epidemiology
KINS 4630, KINS 4630L	4	Exercise Physiology I
KINS 4640-4640L	4	Scientific Principles of Conditioning and Fitness
KINS 4910	3	Clinical Experience in Athletic Training III
KINS 4920	3	Clinical Experience in Athletic Training IV
FDNS 2100	3	Human Nutrition and Food

Sample 4-Year Program of Study

YEAR 1

Fall Semester Spring Semester

CHEM 1211, 1211L Freshman Chemistry I (4) CHEM 1212, 1212L Freshman Chemistry II (4)

YEAR 2

CBIO 2200-2200L Anatomy and (4) CBIO 2210-2210L Anatomy and (4)

Physiology I Physiology II

KINS 2100, 2100L – Prevention and Care (4) KINS 2470 - Practicum in Athletic

of Athletic Injuries Training (1)

KINS 2010 - Introduction to Kinesiology (3) PHYS 1111-1111L – Introductory (4)

Physics-Mechanics, Waves,

Thermodynamics

Summer

KINS 3115E – Structural Kinesiology (3)

YEAR 3

Fall Semester KINS 3100 - Recognition and Evaluation (3)

of Athletic Injuries I

KINS 3240 – General Medical Conditions (3)

in Athletic Training

KINS 3910 - Clinical Experience in Athletic (3)

Training I

KINS 4630/4630L – Exercise Physiology I (4)

Spring Semester

KINS 3200 Recognition and Evaluation (3)

of Athletic Injuries II

KINS 4100 Therapeutics I in Athletic

Training (3)

KINS 3920 – Clinical Experience in (3)

Athletic Training II

KINS 4130 – Athletic Training (3)

Emergency Care

KINS 4200,4200L – Biomechanics (4)

YEAR 4

Fall Semester

KINS 4110 – Therapeutics II in (4)

Athletic Training

KINS 4120 – Administration of Sports (3)

Medicine

KINS 4640-4640L – Scientific Principles (4)

of Conditioning and Fitness

KINS 4910 - Clinical Experience in Athletic (3)

Training III

FDNS – Nutrition (3)

Spring Semester

KINS 3750 – Motor Skills Behavior (3)

KINS 4300/6300-Exercise Epidemiology (3)

KINS 4920 - Clinical Experience in (3)

Athletic Training IV

Rationale for a 126-Hour Athletic Training Major

The ATEP meets the definition provided by the University System of Georgia (USG) for a professional program which states: "a professional program is defined as a program which operates with the sanctions of a national accreditation agency for the program." Further stated in the USG policy, some of the following criteria are used in defining a professional program:

- The program's graduates are required to pass a state or national examination in order to obtain certification or licensure needed for employment;
- Features of the academic program are dictated or strongly influenced by groups employing the graduate of the program;
- Organizations and groups employing students of the program influence to an important extent the supply and demand for graduates of the program;
- Faculty of the program participate in associations or organizations whose members include a significant number of practitioners; these associations or organizations influence the public activities and direction of the industries, businesses, or other groups that employ graduates of the program.

The ATEP clearly meets these guidelines as CAATE is the national accrediting body for athletic training education programs. CAATE determines the Standards for the Accreditation of Entry-Level Athletic Training Education Programs. The purpose of CAATE is to develop, maintain, and promote appropriate minimum standards of quality of entry level Athletic Training education programs. CAATE is sponsored by The American Academy of Family Physicians, the American Academy of Pediatrics, the American Orthopaedic Society for Sports Medicine, and the National Athletic Trainers' Association (NATA).

Following completion of the academic program, students are required to take the Board of Certification (BOC) examination in order to gain national certification and be eligible for licensure in the State of Georgia to practice as an athletic trainer. The BOC has been responsible for the certification of Athletic Trainers since 1969. Accordingly, the BOC provides a certification program for the entry-level Athletic Trainer and establishes requirements for maintaining status as a Certified Athletic Trainer (AT). The BOC is the only accredited certification program for Athletic Trainers in the US. Every five years, the BOC must undergo review and reaccreditation by the National Commission for Certifying Agencies (NCCA). The NCCA is the accreditation body of the National Organization for Competency Assurance (NOCA).

The National Athletic Trainers' Association (NATA) is the national membership organization for the profession of athletic training. The mission of the National Athletic Trainers' Association is to enhance the quality of health care provided by Certified Athletic Trainers and to advance the athletic training profession. Founded in 1950, the NATA has grown to more than 30,000 members worldwide today. The majority of certified athletic trainers choose to be members of the NATA to support their profession, enhance legislative efforts and promote research and education.

Due to the professional program status of the ATEP, we are requesting a 126-hour major. This is due to the academic requirement and number of courses required by CAATE and to enhance the

clinical experience requirement for students. The clinical education benefits the student by directly practicing athletic training skills under the direct supervision of an approved clinical instructor. As defined by CAATE Standard J3.3, "There must be opportunities for students to gain clinical experiences associated with a variety of different populations, including genders, varying levels of risk, protective equipment (to minimally include helmets and shoulder pads), and medical experiences that address the continuum of care that would prepare a student to function in a variety of settings and meet the domains of practice delineated for a certified athletic trainer in the profession." Students are assigned to their clinical rotation by the Program Director and Clinical Coordinator to ensure they received the proper clinical education. Over 90% of the students perform their clinical activities with the UGA Athletic Association while some students receive their clinical education at local high schools or sports medicine clinics located within the greater Athens, Georgia area. These sites and clinical affiliations are continually monitored and evaluated for their effectiveness and student learning by the clinical coordinator.

1. Clearly differentiate which courses are existing and which are newly developed courses.

All the courses except one proposed for the athletic training major are currently published in the UGA Bulletin and are currently being taught at UGA. The Structural Kinesiology course, KINS 3115, is being proposed to be added to the athletic training major.

2. Append course descriptions for all courses (existing and new courses).

See Appendix C for all course descriptions

3. When describing required or elective courses, list all course prerequisites.

Course	Prerequisites
KINS 2100	None
KINS 2470	None
KINS 3100	KINS 2100
KINS 3200	None
KINS 3240	None
KINS 3910	None
KINS 3920	None
KINS 4100	None
KINS 4110	None
KINS 4120	None
KINS 4130	None
KINS 4910	None
KINS 4920	None
KINS 3750	None
KINS 4200/6200	CBIO 2200-2200L and (PHYS
	1111-1111L or PHYS 1211-
	1211L) and permission of
	department

KINS 4300/6300	CBIO 2200-2200L and CBIO 2210-2210L and permission of
	major
KINS 4630, 4630L	CBIO 2200-2200L and CBIO
	2210-2210L
KINS 4640-4640L	KINS 3700 or KINS
	4630/6630
FDNS 2100	None

4. Indicate whether courses in a proposed masters program are cross-listed as undergraduate courses and, if so, what safeguards are employed to ensure that courses taken as undergraduates are not repeated or that requirements are significantly different for graduate students and undergraduates enrolled in the same course.

Not applicable to the Athletic Training Major

5. Provide documentation that all courses in the proposed curriculum have met all institutional requirements for approval.

All ATEP courses are currently published in the UGA Bulletin and are currently being taught at UGA. The Structural Kinesiology (KINS 3115) is currently in the review process by the College of Education and University Undergraduate Curriculum Committees.

6. Append any materials available from national accrediting agencies or professional organization as they relate to curriculum standards for the proposed program.

The ATEP at UGA received its initial accreditation from the Commission on Accreditation of Allied Health Education Programs in 2000 and 2005. See Attachment IV for certificate of accreditation.

7. When internships or field experiences are required as part of the program, provide information documenting internship availability as well as how students will be assigned and supervised.

Students in the ATEP complete four (4) clinical rotations both on and off campus. Students participating in Clinical Rotations are supervised by either a Clinical Instructor or Approved Clinical Instructor as defined by the Standards for Entry-Level Accredited ATEP as set forth by CAATE, Section J3. Also, as defined by CAATE Standard J3.3, "There must be opportunities for students to gain clinical experiences associated with a variety of different populations, including genders, varying levels of risk, protective equipment (to minimally include helmets and shoulder pads), and medical experiences that address the continuum of care that would prepare a student to function in a variety of settings and meet the domains of practice delineated for a certified athletic trainer in the profession." Students are assigned to their clinical rotation by the Program Director and Clinical Coordinator to ensure they received the proper clinical education. Over 90% of the students perform their clinical activities with UGA Athletic Association while some students receive their clinical education at local high schools or sports medicine clinics located within the greater Athens, Georgia area. These sites and clinical

affiliations are continually monitored and evaluated for their effectiveness and student learning by the clinical coordinator.

8. Indicate ways in which the proposed program is consistent with national standards.

All ATEP must be accredited by CAATE (Appendix B) and reviewed periodically by the accrediting organization.

9. List student outcomes associated with this program.

The two (2) primary outcomes of the program are if the student passes the National Certifying Examination and if they are employed following graduation from UGA. Students from the UGA ATEP have had an 85% first-time passing rate, well above the national average of 45%. Over 95% of the ATEP students have been placed in a variety of educational and workplace employment settings. Both students and employers have comments on how well-prepared they are for entry-level employments.

Inventory of Faculty Directly Involved

1. Name, Rank, Academic Discipline, institutions attended and degrees earned The faculty for the program are:

Dr. Michael S. Ferrara, Professor, in the Department of Kinesiology. He earned his Ph.D. from Penn State University, his Masters degree from Michigan State University, and his Bachelors of Science degree from Ithaca College. Dr. Michael S. Ferrara has been the coordinator of athletic training program at University of Georgia for 10 years and a certified athletic trainer for 25 years. He received tenure effective Fall Semester 2000 from the University of Georgia and was promoted to Professor in 2003. Previously, he served as Program Director of Athletic Training at Ball State University for 13 years. See Appendix XX for curriculum vitae for Dr. Ferrara.

Dr. Cathy Brown, Assistant Professor and Clinical Coordinator. Dr. Brown earned her doctoral degree from University of North Carolina-Chapel Hill in 2006 in Exercise Science and Biomechanics. Dr. Brown joined the UGA faculty in the Fall 2006 and she serves as the program's clinical coordinator.

Dr. Earl Cooper, Lecturer in Department of Kinesiology. Dr. Cooper earned his doctoral degree from the University of Georgia in 2004. He joined the UGA faculty in Fall semester 2008 and will provide instruction specifically in the athletic training education program.

2. Expected Responsibilities for Faculty

All University faculty must maintain a 100% load for the fall and spring semesters. The Athletic Training faculty will have the following academic load:

	Ferrara	Brown	Cooper
Teaching and	50%	60%	100%
Advising			
Research	40%	40%	
Service	10%		
(program			
coordination)			

Instructional assignments in the Athletic Training Education Program will be as follows:

Course	Fall Semester	Spring Semester	Summer Semester
KINS 2100	Cooper	Cooper	Ferrara
KINS 2470	Cooper	Cooper	Ferrara
KINS 3100	Brown		
KINS 3200		Ferrara	
KINS 3240	Ferrara		
KINS 3910	Brown		
KINS 3920		Brown	
KINS 4100	Cooper		
KINS 4110		Cooper	
KINS 4120	Cooper		
KINS 4130		Cooper	
KINS 4910	Brown		
KINS 4920		Brown	

3. Scholarship and Publication Record for the past five years

Michael Ferrara

Broglio, S.P., Ferrara, M.S., Sopiarz K., & Kelly M.S. (2008). Reliable change of the sensory organization test. <u>Clinical Journal of Sports Medicine</u>, <u>18</u>, 148-154.

Sosnoff, J.J., Broglio, S.P., & Ferrara, M.S., (2008). Cognitive and motor function are associated following mild traumatic brain injury. <u>Experimental Brain Research</u>, Feb 2008.

Broglio, S.P., Ferrara, M.S., Macciocchi, S.N., Baumgartner, T.A., & Elliott R.A. (2007) Test-retest reliability of computerized concussion assessment programs. <u>Journal of Athletic Training</u>, 42, 509-514.

Broglio, S.P., Macciocchi, S.N. & Ferrara, M.S. (2007). Neurocognitive performance of concussed athletes when symptom free. <u>Journal of Athletic Training</u>, 42, 504-508.

Sosnoff, J.J., Broglio, S.P., Hillman, C.H. & Ferrara, M.S. (2007). Concussion does not influence intra-individual response time variability. <u>Neuropsychology</u>, <u>21</u>, 796-802.

Broglio, S.P., Macciocchi, S.N. & Ferrara, M.S. (2007). Sensitivity of the concussion assessment battery. <u>Neurosurgery</u>, <u>60</u>, 1050-57

Dick, R., Ferrara, M.S., Agel, J.A., Courson, R., Marshall, S.W., Hanley, M.J., & Reifsteck, F. (2007). Descriptive epidemiology of collegiate men's football injuries: National Collegiate Athletic Association injury surveillance system, 1988-1989 through 2003-2004. <u>Journal of Athletic Training</u>, 42, 221-233. **INVITED**

Hunt, T.N., Ferrara, M.S., Miller, L.S., & Macciocchi, S.N. (2007). The effect of effort on baseline neuropsychological tests scores in high school football athletes. Archives of Clinical Neuropsychology, 22, 615-621.

Ferrara, MS. (2006). Globalization of the athletic training profession. <u>Journal of</u> Athletic Training, 41:135-6. **INVITED**

Wang H, Simpson KJ, Ferrara MS, Chamnongkich S, Kinsey T, Mahoney OM. Biomechanical differences exhibited during sit-to-stand between total knee arthroplasty designs of varying radii. (2006) <u>Journal of Arthroplasty</u>, 21:1193-9.

Cooper ER, Ferrara MS, Broglio SP. (2006). Exertional heat illness and environmental conditions during a single football season in the southeast. <u>Journal of Athletic Training</u>, 41:332-6.

Cantu RC, Aubry M, Dvorak J, Graf-Baumann T, Johnston K, Kelly J, Lovell M, McCrory P, Meeuwisse W, Schamasch P, Kevin M, Bruce SL, Ferrara MS, Kelly JP, McCrea M, Putukian M, McLeod TC. (2006). Overview of concussion consensus statements since 2000. Neurosurgery Focus, 21:E3.

Broglio SP, Ferrara MS, Piland SG, Anderson RB, Collie A. (2006). Concussion history is not a predictor of computerised neurocognitive performance. <u>British Journal of Sports Medicine</u>, 40:802-5; discussion 802-5.

Piland SG, Motl RW, Guskiewicz KM, McCrea M, Ferrara MS. (2006). Structural validity of a self-report concussion-related symptom scale. <u>Medicine and Science in Sport and Exercise</u>, <u>38</u>:27-32.

Broglio, S.P., Tomporowski P.D., & Ferrara, M.S. (2005). Balance Performance with a Cognitive Task: A Dual-Task Testing Paradigm. <u>Medicine and Science in Sport and Exercise</u>, <u>37</u>, 689-695.

Guskiewicz, K.M., Bruce, S.L., Cantu, R.C., Ferrara, M.S., Kelly, J.P., McCrea, M, Putukian M., Valovich McLeod, T.C. (2004). National Athletic Trainers' Association

Position Statement: Management of Sport-Related Concussion. <u>Journal of Athletic Training</u>, <u>39</u>, 280-297.

Guskiewicz, K.M., Bruce, S.L., Cantu, R.C., Ferrara, M.S., Kelly, J.P., McCrea, M, Putukian M., Valovich McLeod, T.C. (2004). Recommendation on the Management of Sport-Related Concussion: Summary of the National Athletic Trainers' Association Position Statement. Neurosurgery, 55, 891-896.

Dr. Cathy Brown

Brown CN, Padua DA, Marshall SW, Guskiewicz KM. Individuals with mechanical ankle instability exhibit different motion patterns than those with functional ankle instability and ankle sprain copers. <u>Clinical Biomechanics</u>. 2008; Jul;23(6):822-31.

Ross SE, Arnold BL, Blackburn JT, <u>Brown CN</u>, Guskiewicz KM. Enhanced balance associated with coordination training with stochastic resonance stimulation in subjects with functional ankle instability. <u>Journal of NeuroEngingeering and Rehabilitation</u>. 2007;4(47). doi:10.1186/1743-0003-4-47. Available online at: http://www.jneuroengrehab.com/content/4/1/47.

Brown CN, Guskiewicz KM, Bleiberg J. Effect of athlete characteristics on outcome scores for computerized neuropsychological assessment: A preliminary analysis. <u>Journal of Athletic Training</u>. 2007;42(4):515-523.

Brown CN, Mynark RG. Balance deficits in recreational athletes with chronic ankle instability. <u>Journal of Athletic Training</u>. 2007;42(3), 367-373.

Brown CN, Ross SE, Mynark R, Guskiewicz KM. Assessing functional ankle instability using joint position sense, time to stabilization, and electromyography. <u>Journal of Sport Rehabilitation</u>. 2004;13:122-134.

Dr. Earl Cooper

Broglio SP, Monk A, Sopiarz K, Cooper ER (2008) The Influence of Ankle Support on Postural Stability. <u>Journal of Science and Medicine in Sport</u>, doi:10.1016/j.jsams.2007.12.010

Cooper ER, Broglio SP, Ferrara MS (2006) Exertional Heat Illness and Environmental Conditions During a Single Football Season in the Southeast, <u>Journal of Athletic Training</u>, 41, 2006, pp 332-336.

Cooper ER et al (2001) Definitional Problems in Mild Head Injury Epidemiology, Athletic Therapy Today, 6; 6-12.

Cooper ER, (1999) Guidelines for the use of OTC Medications in the High School Setting, <u>Athletic Therapy Today</u>, 5; pp 52-55.

Cooper ER, Ferrara MS, Resch J, Meeler K (2007. The Incidence of Exertional Heat Illness among Division I and III Collegiate Football Players – Preliminary review of a Three Year Study, Journal of Athletic Training, 42,S51.

Resch J, Keeler K, Brown C, Cooper E, Ferrara M (2007). Relationships Between Weather Station Data and Heat Stress/Thermal Environment Monitors, <u>Journal of Athletic Training</u>, 42, S17.

Cooper ER, Broglio SP, Ferrara MS, Courson RW, (2005). National Rates of Exertional Heat Illnesses in College Football Players, <u>Journal of Athletic</u> Training, 40, S53.

Broglio SP, Cooper ER, Ferrara MS, Courson RW, (2005). National Differences in Environmental Conditioning During Football, <u>Journal of Athletic Training</u>, 40, S53.

Professional Activity

<u>UNIVERSITY OF GEORGIA – Michael Ferrara</u>

University Human Subjects Review Board, 2003-Present.

College of Education, Promotion and Tenure Committee, 2003.

University Academic Honesty Committee – 1999-Present.

College of Education, Undergraduate Curriculum Committee, 2000-2002. Chair, 2001-2002

Blue Ribbon International Committee, College of Education, 2001-Present. Chair, Joint Review Committee-Athletic Training, 1998-2001.

ATHLETIC TRAINING PROFESSION

Past-President, World Federation of Athletic Training and Therapy, 2005-Present.

President, World Federation of Athletic Training and Therapy, 2000-2005.

Associate Editor, Journal of Athletic Training, 2001-Present.

Member, Board of Directors for the Board of Certification, 2006-Present.

Chair, World Federation of Athletic Training Task Force, National Athletic Trainers Association, 1997-Present.

Chair, World Federation of Athletic Training Task Force, National Athletic Trainers Association, 1997-Present.

Committee on Allied Health Education Programs, Accreditation Review Team for Entry Level Athletic Training Programs, 1999 to Present.

4. Expected Responsibility in the Program

Dr. Michael Ferrara will serve as the program coordinator responsible for the overall administration and compliance with accreditation standards. Dr. Cathy Brown will be responsible for supervising the clinical activities of the athletic training students. Dr. Cooper will teach in the academic program and provide assistance with administrative and clinical responsibilities within the academic program.

5. Additional Faculty

The Department of Kinesiology has an outstanding faculty for instruction in the athletic training program. The faculty include: Dr. Ted Baumgartner, Dr. Kirk Cureton, Dr. Elaine Cress, Dr. Rod Dishman, Dr. Harry DuVal, Dr. Kevin McCully, Dr. Patrick O'Conner, Dr. Michael Schmidt, Dr. Kathy Simpson, Dr. Phil Tomporowski and Dr. Lesley White. There is no need for additional faculty for the program.

Clinical Faculty

In additional to the academic faculty, a number of the clinical athletic trainers also serve as clinical instructors for the Department of Kinesiology. The UGA Athletic Association supports these activities of the staff athletic trainers to serve as clinical instructors of the athletic training students. Occasionally, the clinical athletic trainers will teach in the academic curriculum. The College of Education (COE) and the Department of Kinesiology have reached an agreement with the UGA Athletic Association (AA) for the clinical athletic trainers to teach athletic training courses for a standard stipend rate.

Outstanding Programs of this Nature in Other Institutions

Three outstanding athletic training education program are 1. University of North Carolina, Chapel Hill, North Carolina, Dr. Darin Padua, Program Director, 2. University of Alabama, Tuscaloosa, Alabama, Dr. Deidre Dunn-Leaver, Program Director, 3. Pennsylvania State University, University Park, PA, Dr. John Miller, Program Director. These programs stand out because of the excellence of the faculty and students, the high quality of the instruction, quality and quantity of research produced and the success of the graduates of the program.

Inventory of Pertinent Library Resources

The University of Georgia has two libraries available for student use: the main library and the science library. The science library is the primary facility that contains many periodicals and textbooks used for athletic training education programs. Both libraries can be accessed for literature searches via the Internet and/or electronic databases. The libraries have over 30 journals related to athletic training and sports medicine and several hundred textbooks. Students utilize the library for course assignments and projects.

Each faculty member involved with the program maintains an active library. Dr. Ferrara has current issues of <u>Journal of Athletic Training</u>, <u>American Journal of Sports Medicine</u>, <u>Clinics in Sports Medicine</u> and <u>Clinical Journal of Sports Medicine</u>. Further, each clinical educator has an extensive library of textbooks, articles and educational materials. The Butts-Mehre Heritage Hall Athletic Training Room has copies of the <u>American Journal of Sports Medicine</u> and <u>Journal of Athletic Training</u> as well as other textbooks, journals and newsletters, while the Stegeman Athletic Training Room maintains current copies of the <u>Journal of Athletic Training</u> and American Journal of Sports Medicine.

Facilities

The Ramsey Center was completed in 1996 and contains the offices of the Department of Kinesiology, the Athletic Training Educational Program, and the Athletic Training Research and Education Laboratory. The athletic training program utilizes several different facilities for the education of athletic training students and clinical care of athletes. The goal in the design of the athletic training facilities at the University of Georgia was to provide the finest sports medicine facilities possible for the student athletes, featuring "state-of-the-art" modalities and rehabilitation devices. There is one laboratory dedicated solely for athletic training research and education, and four facilities used for clinical education. These athletic training facilities provide an excellent educational environment for the athletic training students allowing for ample exposure to current trends in sports medicine.

Athletic Training Research and Education Laboratory:

The Athletic Training Research and Education Laboratory, located in Ramsey Center (Room 110), has 990 square feet of space. The laboratory serves as a facility for the hands-on teaching of injury evaluation, modalities, rehabilitation, athletic training emergency care, taping and bracing. Easily accessible from the teaching classrooms, the laboratory has one entrance from the main hallway. The laboratory is equipped with treatment tables, numerous therapeutic modalities, emergency care equipment, rehabilitation devices, ice machine, and sink with hot and cold water. There is more than sufficient cabinet space located in various areas of the room for storage of supplies, teaching aids, and computer equipment.

Butts-Mehre Heritage Hall Athletic Training Room

The room consists of approximately 3,276 square feet of space, and is easily accessible for both male and female athletic training students. The room is subdivided into a rehabilitation area, a taping/treatment area, a physician examination room, underwater hydrotherapy pool, a hydrotherapy room, a storage area, office space for the Director of Sports Medicine and another office of the Associate Athletic Trainer.

Stegeman Coliseum Athletic Training Facility

This facility is located in close proximity to the Butts-Mehre Heritage Hall Athletic Training Room. This facility provides 3,400 sq. ft. of space for the health care services of athletes participating in 14 Olympic sports. The room is subdivided into a taping area, treatment area, hydrotherapy, physician examination room, rehabilitation area, isokinetic area, four offices for six staff athletic trainers and insurance coordinator, storage area, bathroom, and wash area.

Ramsey Center Athletic Training Room

Three athletic teams (Mens and Womens Swimming and Volleyball) regularly use the Ramsey Center facility for pre- and post-practice preparation and therapeutic treatment. This athletic training room is a converted 400-square-foot facility, which contains a common area for taping/treatment, hydrotherapy and office. No space in this room has been designated for rehabilitation, since all rehabilitation for these sports is conducted in the Stegeman Coliseum Athletic Training Facility.

Soccer/Softball Complex

This facility was completed in Fall 2000. This facility includes locker room, showers, public restrooms and an athletic training room. Currently, 306 square feet has been allocated to athletic training facility for soccer and another facility for softball. This facility will be used for pre/post practice preparation and treatments.

Administration

The current program in the Department of Kinesiology is administered by Dr. Kirk Cureton, Head of the Department of Kinesiology, who oversees all academic programs offered by the Department. Dr. Harry DuVal serves as the undergraduate program coordinator and Dr. Michael Ferrara serves as coordinator of the athletic training education program. There is superior continuing support for the program from the University, College, Department and the Athletic Association.

Assessment

Assessment of the Athletic Training Education Program

The willingness and commitment to objectively assess the quality and success of student achievement, the academic program and faculty accomplishments are critical to the stability and viability of a program. Information and insight from such efforts offer direction and reaffirmation of goals and objectives. The athletic training program participates in several assessment programs that are conducted by the University, College, and Department. The purpose of the assessment procedures is for the program to validate its educational outcomes and ensure it is accomplishing its goals and objectives. This calls for a program to regularly assess its philosophy and mission, goals and objectives. Based on these data, an action plan was developed and implemented that reflects a constant and rigorous assessment process that reflects current academic trends, technology changes, and accreditation standards.

The UGA Athletic Training Program has developed and implemented a comprehensive assessment program. This includes obtaining data from the senior exit survey, alumni questionnaires, and survey of employers of UGA athletic training graduates. Further we are also collecting data from current students in the athletic training program regarding their satisfaction with their academic courses and clinical experiences.

Assessment Data Results

Students have been generally satisfied with the instructional quality in the athletic training classes. Since the beginning of the program in 1998, student evaluations of teaching has been high, with most instructors receiving scores of 4.35/5.00 for teaching effectiveness and scores of 4.65 on value of course to professional development. Students have also been generally satisfied with their clinical instruction with mean scores of 4.62 for effectiveness of clinical instructor. Employers also have been very satisfied and impressed with the quality and knowledge demonstrated by UGA athletic training graduates. Lastly, students who graduated from the program found that the program prepared them well for the future in the profession. They felt they were well prepared for the BOC National Certification Examination and valued their academic and clinical instruction as a student.

Since the program's beginning in 1998, the following changes have occurred within the athletic training education program:

- a. Developed admission and retention procedures for the program.
- b. Developed a clinical rotation policy to ensure that students gain clinical experience with upper and lower extremity injuries, general medical clinical rotation and experience with an equipment-intensive sport.
- c. Increased the credit hours for EXRS 2100 from 3 CH to 4 CH to include a laboratory component.
- d. Added laboratory classes for EXRS 3100, EXRS 3120, EXRS 4100, EXRS 4110.
- e. Increased credit hours for EXRS 4120 from 2 CH to 3 CH.
- f. Increased the credit hours for EXRS 2130 from 2 CH to 3 CH and renumbered EXRS 4130.
- g. Added General Medical Conditions in Athletic Training, EXRS 3240, 3 CH to the curriculum.
- h. Added clinical education courses to the curriculum. These are:
 - a. EXRS 3910 Clinical Experience in Athletic Training I, 1 CH
 - b. EXRS 3920 Clinical Experience in Athletic Training II, 1 CH
 - c. EXRS 4910 Clinical Experience in Athletic Training III, 1 CH
 - d. EXRS 4920 Clinical Experience in Athletic Training IV, 1 CH

The admission and retention policy went into effect in the Fall semester 1998. The laboratory experiences for EXRS 3100, EXRS 3120, EXRS 4100, EXRS 4110 went into effect Spring semester 1999. The laboratory classes for EXRS 2100 were begun in the Fall semester 1999. In 2000, EXRS 2130 was increased to 3 credit hours and renumbered EXRS 4130 and the five new courses (EXRS 3240, 3910, 3920, 4910, 4920) were approved and implemented. The current clinical rotation policy went into effect in the Fall semester 2002. Our superior results on the BOC national certification examination (90% success rate) and our high placement rate (95%) suggests UGA athletic training graduates are in demand and are doing well when compared to peer institutions. The athletic training education program is committed to providing superior education and clinical experiences for the student.

Accreditation

The current ATEP is under accreditation from Commission of Accreditation for Athletic Training Education (CAATE). UGA received accreditation in 2000 and 2005 and the next self-study is scheduled for 2011-2012. The program will continue under its current format until the new degree program is reviewed by the Board of Regents. In addition, the ATEP will continue to comply with SACS requirements as set forth by UGA.

Affirmative Action Impact

There should be no impact of the athletic training major on the University's affirmative action program. Typically, the athletic training education program has approximately 10% minority and international students.

Degree Inscription

Bachelor of Science in Education: Athletic Training

Fiscal and Enrollment Impact, and Estimated Budget

The enrollment in the athletic training education program has been steadily increasing from the program's inception in 1998. Development of the athletic training major will ensure compliance with accreditation standards, allow for the recruitment of high quality students to be enrolled in the program, maintain eligibility standards for the BOC national certification examination and ensure outstanding graduates for the market. The Department of Kinesiology has dramatically increased its credit-hour production since the inception of the program.

The athletic training program is fully funded and supported by the College of Education and the Department of Kinesiology. The initial funding for the program was obtained from a grant from Coca-Cola Foundation and NovaCare Inc. in 1997-98. Funding from the Coca-Cola Foundation was dedicated to the salary of the Program Director of Athletic Training. This was a four-year grant in which the salary amount was internalized gradually over the four years. NovaCare, Inc. contributed \$105,000 for research equipment and educational supplies of the athletic training education program. Again, money was spread over four years with complete institutionalization of the operational budget by the fourth year. The current operating money that the program receives from the College and the Department is sufficient to operate the athletic training major and no new money is sought for operational costs.

Appendix A



Standards for the Accreditation of Entry-Level Athletic Training Education Programs

© Commission on Accreditation of Athletic Training Education, rev'd 6-30-08

Standards for the Accreditation of Entry-Level Athletic Training Education Programs

The purpose of the Commission on Accreditation of Athletic Training Education (CAATE) is to develop, maintain, and promote appropriate minimum standards of quality of entry level Athletic Training education programs. CAATE is sponsored by The American Academy of Family Physicians, the American Academy of Pediatrics, the American Orthopaedic Society for Sports Medicine, and the National Athletic Trainers' Association (NATA).

The Standards for the Accreditation of Entry Level Educational Programs for the Athletic Trainer (Standards) are used to prepare entry-level athletic trainers. It is each institution's responsibility to demonstrate compliance with these Standards in order to obtain and maintain recognition as a CAATE-accredited Athletic Training Education Program (ATEP). A list of accredited programs is published and available to the public.

These *Standards* are to be used for the development, evaluation, analysis, and maintenance of ATEPs. The *Standards* also contain a glossary of terms used throughout the document; the definitions provided in the glossary must be applied as stated. Via comprehensive and annual review processes, CAATE is responsible for the evaluation of a program's compliance with the *Standards*. The Standards provide minimum academic requirements; institutions are encouraged to develop sound innovative educational approaches that substantially exceed these *Standards*.

Description of the Professional

The Certified Athletic Trainer (ATC ®) works with physicians and other medical personnel, employers, patients, parents, guardians, and athletic personnel in the development and coordination of efficient and responsive health care delivery systems. Athletic trainers are integral members of the health care team in secondary schools, colleges and universities, professional sports programs, sports medicine clinics, corporate /industrial, and other health care settings.

The athletic trainer's professional preparation is based on the development of specified educational competencies and clinical proficiencies. Through a combination of formal classroom and clinical instruction and clinical experience, the athletic trainer is prepared to provide health care within each of the following content areas:

- Risk management and injury prevention
- Pathology of injuries and illnesses
- Orthopedic clinical examination and diagnosis
- Acute care of injury and illness
- Pharmacology
- Therapeutic modalities

- Conditioning and rehabilitative exercise
- Medical conditions and disabilities
- Nutritional aspects of injury and illness
- Psychosocial intervention and referral
- Health care administration
- Professional development and responsibility

General Requirements for Accreditation

Section A: Sponsorship

- A1. The sponsoring institution must be accredited by an agency recognized by the United States Department of Education or by the Council for Higher Education Accreditation.
- **A2.** Sponsoring institutions must submit documentation that it is authorized, under applicable law or other acceptable authority, to provide a program of postsecondary education. Institutions outside of the United States must submit documentation that the institution is recognized and authorized by a national or international authority to provide a program of postsecondary education.

- A3. Current formal affiliation agreement(s) or memorandum(s) of understanding must be developed and endorsed by appropriate administrative personnel from all institutions (i.e., bearing signature authority). The agreement must delineate responsibilities for:
 - A3.1 program administration,
 - **A3.2** instruction,
 - A3.3 supervision, and
 - **A3.4** other functions as deemed appropriate by the sponsoring institution or the affiliate institution
- A4. Each affiliated clinical setting where students are assigned to a clinical instructor for student learning and/or clinical practice (excluding the ATEP sponsoring institution) must have an affiliation agreement. In the case where the administrative oversight of the clinical instructor differs from the affiliate site, formal agreements must be obtained from both parties.

Section B: Personnel

B1. Program Director

B1.1 Requirements of the Position

The program director must:

- **B1.11** be a full-time position of the sponsoring institution,
- **B1.12** have full faculty status, rights, responsibilities, and privileges as defined by institution policy and be consistent with other similar positions at the institution,
- **B1.13** have programmatic administrative and supervisory responsibility recognized as a department assignment consistent with other similar assignments at the institution, and
- **B1.14** have an amount of released/reassigned workload that is necessary to meet the administrative responsibilities of this assignment. This released/reassigned workload must be consistent with similar assignments at the institution.

B1.2 Responsibilities of the Position

The Program Director must have input to and assurance of the following program features:

- **B1.21** organization and administration of all aspects of the educational program,
- **B1.22** curricula planning and development,
- **B1.23** fiscal and budgetary input and management as determined by the institution.
- **B1.24** equitable distribution of educational opportunities at all clinical and classroom sites. This responsibility may be shared with a faculty member designated as a clinical coordinator; however, the Program Director has ultimate responsibility, and
- **B1.25** recognizable institutional responsibility or oversight for the day-to-day operation, coordination, supervision, and evaluation of all components (academic and clinical education) of the ATEP.

B1.3 Qualifications

The Program Director must:

- **B1.31** hold current national certification and be in good standing with the Board of Certification (BOC),
- **B1.32** have a minimum of five years experience as a BOC-certified athletic trainer,
- **B1.33** possess a current state athletic training credential for those states that require professional credentialing for athletic trainers, and
- **B1.34** demonstrate teaching, scholarship, and service consistent with institutional standards.

B2. Faculty and Instructional Staff

B2.1 Qualifications

All faculty and instructional staff members assigned and responsible for the instruction of required coursework must be:

- **B2.11** qualified through professional preparation and experienced in their respective academic areas as determined by the institution,
- B2.12 recognized by the institution as faculty or instructional staff, and
- **B2.13** familiar with and incorporate the *Athletic Training Educational Competencies* as they pertain to their respective teaching areas.

B2.2 Number

There must be sufficient faculty and instructional staff to:

- **B2.21** advise and mentor students,
- B2.22 provide oversight of program clinical education and experiences,
- **B2.23** provide instruction and supervision on a regular planned basis, and
- **B2.24** maintain student to faculty and instructional staff ratios to allow for educational classroom and laboratory instruction and evaluation as consistent with institutional practice.

B3. Clinical Faculty and Staff

B3.1 Clinical Instructor Educator (CIE)

A CIE must be:

- **B3.11** recognized and designated by the institution as the CIE for the educational program,
- **B3.12** BOC credentialed for a minimum of three years,
- **B3.13** designated and authorized by the institution to oversee Approved Clinical Instructor (ACI) training, and
- **B3.14** knowledgeable in the content areas required for the training of Approved Clinical Instructors (ACI).
- **B3.15** If more than one individual is designated as the CIE for the educational program, then at least one of those individuals must be a BOC credentialed athletic trainer.

B3.2 Approved Clinical Instructor (ACI) Qualifications

An ACI must:

- **B3.21** be credentialed in a health care profession (see glossary),
- **B3.22** be an ATC ® or appropriately credentialed health care professional for a minimum of one year, and
- **B3.23** not be currently enrolled in the entry level athletic training education program at the institution,
- **B3.24** ACI training must include the following content areas:
 - **B3.241** learning styles and instructional skills.
 - **B3.242** review of the *Athletic Training Educational Competencies*,
 - B3.243 evaluation of student performance and feedback,
 - **B3.244** instructional skills of supervision, mentoring, and administration.
 - **B3.245** program/institution-specific policies, procedures, and clinical education requirements.
 - **B3.246** legal and ethical behaviors,
 - B3.247 communication skills,
 - B3.248 appropriate interpersonal relationships, and
 - **B3.249** appropriate clinical skills and knowledge.
- **B3.25** be trained/re-trained by the institution's CIE at least once every three years.

B3.3 Approved Clinical Instructor (ACI) Responsibilities

An ACI must function to:

- **B3.31** provide instruction and/or evaluation of the *Athletic Training Educational Competencies*,
- **B3.32** provide assessment of athletic training students' clinical proficiency

- **B3.33** have regular communication with the appropriate ATEP administrator, and
- **B3.34** demonstrate understanding of and compliance with the policies and procedures of the ATEP.

B3.4 Clinical Instructor (CI) Qualifications

A CI must:

- **B3.41** be a credentialed health care professional (see glossary).
- **B3.42** be appropriately credentialed for a minimum of one year. If a CI is credentialed for less than one year, the program must develop and document the implementation of a plan for supervision of that CI by an experienced credentialed CI that ensures the quality of instruction provided to the athletic training students.
- **B3.43** not be currently enrolled in the athletic training education program at the institution.

B3.5 Clinical Instructor (CI) Responsibilities

A CI must:

- **B3.51** supervise the students during clinical and/or field experiences,
- **B3.52** have regular communication with the appropriate ATEP administrator, and
- **B3.53** demonstrate understanding of, and compliance, with the policies and procedures of the ATEP.

B3.6 Medical and Other Health Care Personnel

There must be involvement of various medical and other health care personnel in formal classroom settings on a planned, annual, and continuing basis.

- **B3.61** A minimum of two physicians (MD, DO) with differing specialties must participate in formal, scheduled classroom instruction that is a component of a required course(s).
- **B3.62** A minimum of two allied health care professionals (refer to glossary) other than physicians, with differing specialties, with professional credentials other than, or in addition to, Certified Athletic Trainer must participate in formal, scheduled classroom instruction that is a component of a required course(s).

B4. ATEP Medical Director

The medical director must:

- **B4.1** be an MD/DO who is licensed to practice in the state housing the ATEP, and
- **B4.2** in coordination with the program director, act as a resource and expert for the medical content of the ATEP in both formal classroom and supervised clinical experiences.

B5. Administrative and Support Staff

- **B5.1** Equitable professional clerical/secretarial and other support staff must be available to support program personnel comparable to that provided to similar academic programs in the institution.
- **B5.2** Clerical/secretarial and other support staff must be sufficient to support the program's mission and goals.

Section C: Resources

C1. Financial Resources

- **C1.1** The academic unit of the sponsoring institution must provide and manage adequate (as defined by C1.3), equitable and continuing resources necessary to operate an athletic training education program.
- **C1.2** The ATEP budget must be consistent and comparable with other academic programs funded by the sponsoring institution.
- **C1.3** Funding must be available for the following essential needs and functions:

- C1.31 expendable supplies,
- C1.32 capital equipment,
- C1.33 course instruction,
- C1.34 operating expenses, and
- C1.35 professional development.

Section D: Physical Resources

D1. Facilities

- **D1.1** Physical facilities must include:
 - **D1.11** classrooms that are consistent in size and quality with classrooms used for similar academic programs at the sponsoring institution.
 - **D1.12** laboratories that are consistent in size and quality with laboratories used for similar academic programs at the sponsoring institution.
 - **D1.13** clinical facilities that are consistent in size and quality with clinical facilities used for similar academic programs at the sponsoring institution, and
 - **D1.14** administrative offices must be provided for program staff and faculty on a consistent basis similar to other academic programs at the sponsoring institution.
- **D1.2** An athletic training facility and other clinical settings must provide the primary setting(s) in which the clinical portion of the athletic training educational program is conducted.
- **D1.3** The educational facilities for all instructional sites used for classroom and laboratory instruction must be equitable for students at each site; this includes distance or remote education sites.
- **D1.4** Classroom and laboratories must have seating, lighting, heating/cooling, and ventilation that will provide an atmosphere to facilitate the learning process.
- **D1.5** There must be designated space for confidential counseling of students by ATEP faculty.
- **D1.6** There must be secure, private storage space for student files and records.

D2. Learning and Instructional Resources

- **D2.1** The number and quality of instructional aids must allow for learning, practice, and evaluation during formal instruction and the clinical practice components of the ATEP.
- **D2.2** Instructional aids must be available to provide instruction and student practice of the clinical proficiencies and psychomotor competencies as identified in the *Athletic Training Educational Competencies*.
- **D2.3** At all distance or remote education sites, learning and instructional equipment and supplies used for classroom and laboratory instruction and assessment must be comparable and equally accessible to all students.
- **D2.4** At all distance or remote education sites, educational technology used for formal instruction and assessment must be comparable and equally accessible to all students regardless of location.

D3. Therapeutic Modalities and Rehabilitation Resources

- **D3.1** The therapeutic modalities and rehabilitation equipment, identified in the psychomotor and clinical proficiency sections of the *Athletic Training Educational Competencies*, must be available for formal instruction and practice.
- **D3.2** Therapeutic modalities and rehabilitation equipment appropriate for clinical use must be available for clinical education purposes.
- **D3.3** At all distance or remote education sites, all therapeutic modalities and rehabilitation equipment used for classroom and laboratory instruction and assessment must be comparable and equally accessible to all students regardless of location.

D4. First Aid and Emergency Care Equipment

- **D4.1** The first aid and emergency care equipment, identified in the *Athletic Training Educational Competencies*, must be available for formal instruction and practice.
- **D4.2** First aid and emergency care equipment, appropriate to the emergency action plan of the clinical setting, must be available for clinical education purposes.

D4.3 At all distance or remote education sites, all first aid and emergency equipment used for classroom and laboratory instruction and assessment must be comparable and equally accessible to all students regardless of location.

D5. Library and other Information Sources

- **D5.1** Students must have reasonable access to the information resources needed to adequately prepare them to be entry-level professionals. This includes current editions of books, periodicals, and other reference materials in contemporary formats related to the programmatic goals.
- **D5.2** At all distance or remote education sites, all library and other information resources used for classroom and laboratory instruction and student assessment must be comparable and equally accessible to all students regardless of location.

Section E: Operational Policies and Fair Practices

E1. Program Admission and Advertisements

- E1.1 Program admission criteria (E1.11-E1.13) must be clearly defined and published consistently in official institutional academic documents, handbooks, and/or other published and announced information sources. It is not necessary to have all information in all documents, but there must be appropriate reference to a publicly accessible document that includes all program admission criteria. Program admission criteria must include the:
 - E1.11 technical standards,
 - E1.12 competitive admissions process, and
 - **E1.13** transfer and retention policies.
- **E1.2** Program admission criteria must be available to prospective and current students.
- **E1.3** Program policies, procedures, and requirements must be accurate and consistent in all published and announced information sources (e.g., web-sites, catalogs, recruiting materials).
- **E1.4** Announcements and advertising must accurately reflect current terminology of the profession and program offered (e.g., BOC, athletic training student, and the ATEP title of athletic training).
- **E1.5** Student and faculty recruitment, student admission, and faculty employment practices must be non-discriminatory with respect to race, color, creed, gender, sexual orientation, age, disabling conditions (handicaps), and national origin and must be consistent with defined institutional policy.
- **E1.6** Academic tuition, fees, and other ATEP required costs to the student must be made known to all applicants and current students in official institutional documents (e.g., published and announced information sources).
- **E1.7** The institution must have a published procedure available for processing student and faculty grievances.
- **E1.8** Policies and processes for student withdrawal and for refund of tuition and fees must be published in official institutional publications or other announced information sources and made available to applicants.
- **E1.9** Policies and procedures governing the award of available funding for work-study, scholarship, or other funding opportunities must be accessible by all students.
- E1.10 Work-study, scholarship, or other funding opportunities must not require students to perform athletic training skills or services as a replacement of certified athletic training staff.
- **E1.11a** The welfare of all athletic training students must be protected by liability insurance that can be documented through policy declaration pages or other legally-binding documents.

Section F: Health and Safety

- **F1.** A physical examination by a MD/DO/NP/PA must verify that the student is able to meet the physical and mental requirements with or without reasonable accommodation of an athletic trainer. This examination must include:
 - **F1.1** a medical history,
 - F1.2 an immunization review, and
 - **F1.3** evidence of a physical examination that is maintained by the institution in accordance with established confidentiality statutes.
- F2. Technical standards required for admission to the program must be clearly defined, published, and approved by appropriate institutional representatives having the authority to act on behalf of the institution; these requirements must be readily accessible to current and prospective students. Students who are unable to meet the technical standards and who require accommodations must attain verification by a physician or appropriate institution disability officer as defined by sponsoring institution policy.
- **F3.** Athletic training students must be officially enrolled in the clinical portion of the program, be formally instructed and formally assessed on athletic training clinical skills as part of a required course prior to performing those skills on patients.
- **F4.** An active communicable disease policy must be established, published in program documents that are accessible to current students, and enforced for ATEP students by program personnel.
- **F5.** Electrical modalities and electrical safeguards (e.g., GFIs) must annually pass safety inspections and be calibrated by a qualified technician at all clinical sites.
- **F6.** The students must comply with Occupational Safety and Health Administration or appropriate blood-borne pathogen procedures. Students must receive:
 - **F6.1** formal blood-borne pathogen training before being placed in a potential exposure situation. This includes participation in all clinical settings and situations including the clinical observation portion of the clinical education experience (if applicable).
 - **F6.2** annual education in pathogen and infection control,
 - **F6.3** access to and utilize appropriate blood-borne pathogen barriers,
 - **F6.4** access to and utilize proper sanitary precautions, and
 - **F6.5** access to appropriate biohazard disposal equipment and procedures at each clinical site.
- **F7**. Students must have access to a written emergency action plan at each clinical site where assigned for clinical education.

Section G: Student Records

- **G1.** Student records must be maintained in a secure location(s), be accessible to only designated program personnel, and document the following:
 - **G1.1** evidence of completion of published admission criteria,
 - **G1.2** verification of all completed clinical experiences,
 - **G1.3** student and ACI/CI signed clinical experience evaluations,
 - **G1.4** completed clinical competencies and proficiencies including skill/technique acquisition and learning over time evaluations,
 - **G1.5** completed and signed technical standards.
 - **G1.6** written documentation of a physical examination, including immunizations, by a MD/DO, NP, or PA,
 - **G1.7** remediation and disciplinary actions.
 - **G1.8** appropriate academic progress (e.g., grade tracking/completion forms, advisement forms)
 - **G1.9** written documentation of current first aid, CPR, and AED training consistent with the *Athletic Training Educational Competencies*, and
 - **G1.10** written documentation of annual blood-borne pathogen training.

Section H: Outcomes

- H1. Programs must routinely secure qualitative and quantitative data to determine the outcomes and effectiveness of the program. These outcomes must relate to the program's stated educational mission and goals and include measures related to didactic and clinical instruction, student learning (both clinical and didactic), and overall program effectiveness. The specific volume and nature of outcome information is influenced by the individual character of the institution and should be in keeping with other academic programs within the institution.
- **H2**. There must be a comprehensive (master) assessment plan to evaluate all aspects of the educational program. Assessments used for this purpose may include, but are not limited to, clinical site evaluations, clinical instructor evaluations, completed clinical proficiency evaluations, academic course performance, employer and/or alumni surveys, senior exit evaluations, and BOC examination passing rates.
 - **H2.1** The evaluation plan must include, minimally, assessments that are designed to evaluate:
 - **H2.11** achievement outcomes relative to the educational mission and goals of the program,
 - **H2.12** effectiveness of learning,
 - H2.13 quality of didactic instruction, and
 - **H2.14** quality of clinical instruction.
 - **H2.2** The ATEP must provide data that demonstrates effectiveness as related to:
 - **H2.21** achievement of the programs educational mission and goals,
 - H2.22 effectiveness of learning,
 - H2.23 quality of didactic instruction, and
 - **H2.24** quality of clinical instruction.
 - **H2.3** The program must document an ongoing plan for obtaining the outcome data delineated in H2.2
- Programs that include distance education (i.e., online learning), or remote education components, must provide documentation of instructional effectiveness of any distance education or off-campus educational components in relation to the overall program and its impact on all students of the program of both on and off-site locations.

Section I. Curriculum and Instruction

- **11.** Description of the Program The athletic training education program must be an undergraduate or graduate program that offers a major or graduate equivalent in athletic training. The undergraduate major or graduate major equivalent must be:
 - **I1.1** consistent with other majors offered within the institution,
 - **I1.2** identified as an academic athletic training major program in institutional academic publications, and
 - indicated on the official transcript of the student as is normally designated for other undergraduate majors or graduate major equivalents at the institution.
- **12.** Athletic training faculty and students must have a clearly written and consistent description of the academic curriculum available to them. This description must include:
 - **I2.1** program mission and goals,
 - **12.2** curriculum and course sequence,
 - 12.3 clinical education, and
 - 12.4 clinical and didactic requirements for completion of the major or graduate major equivalent.
- 13. The content of the curriculum must include formal instruction in the expanded subject matter as identified in the *Athletic Training Educational Competencies*. Formal instruction must involve teaching of required subject matter with instructional emphasis in structured classroom and laboratory environments.

- **14.** Clinical experiences must follow a logical progression that allows for increasing amounts of clinically-supervised responsibility. The clinical education plan must follow and reinforce the sequence of formal classroom and psychomotor skill learning.
- **15.** Clearly written course syllabi are required for all courses that deliver content contained in the *Athletic Training Educational Competencies*. Syllabi must include:
 - **I5.1** course title, number, and term,
 - **I5.2** course instructor.
 - **I5.3** learning objectives,
 - **I5.4** specific evaluation criteria and weightings,
 - **I5.5** objective course completion criteria, and
 - **15.6** daily/weekly topics in sufficient detail to determine course content relative to assigned competencies and clinical proficiencies.

Section J: Clinical Education

- J1. The athletic training curriculum must include provision for clinical experiences under the direct supervision of a qualified ACI or CI (see Section B) in an appropriate clinical setting.
 - **J1.1** ACI or CI must be physically present and have the ability to intervene on behalf of the athletic training student to provide on-going and consistent education.
 - **J1.2** The ACI or CI must consistently and physically interact with the athletic training student at the site of the clinical experience.
 - **J1.3** There must be regular planned communication between the ATEP and the ACI or CI.
 - J1.4 The number of students assigned to an ACI or CI in the clinical experience component must be of a ratio that will ensure effective education and should not exceed a ratio of eight students to an ACI or CI in the clinical setting.
- J2. Clinical experiences must provide students with opportunities to practice and integrate the cognitive learning, with the associated psychomotor skills requirements of the profession, to develop entry-level clinical proficiency and professional behavior as an Athletic Trainer as defined by the NATA Educational Competencies.
- **J3.** Clinical experiences must be contained in individual courses that are completed over a minimum of two academic years.
 - **J3.1** Course credit must be consistent with institutional policy or institutional practice.
 - **J3.2** Courses must include objective criteria for successful completion.
 - J3.3 There must be opportunities for students to gain clinical experiences associated with a variety of different populations including genders, varying levels of risk, protective equipment (to minimally include helmets and shoulder pads), and medical experiences that address the continuum of care that would prepare a student to function in a variety of settings and meet the domains of practice delineated for a certified athletic trainer in the profession.
 - J3.4 Student clinical experiences must be conducted in such a way to allow the ATEP faculty/staff to regularly and frequently evaluate student progress and learning, as well as the effectiveness of the experience.
 - **J3.5** The students' clinical experience requirements must be carefully monitored.
 - **J3.51** The length of clinical experiences should be consistent with other comparable academic programs requiring a clinical or supervised practice component. Such policies must be consistent with federal or state student work-study guidelines as applicable to the campus setting.
 - **J3.52** Consideration must be given to allow students comparable relief (days off) from clinical experiences during the academic year as compared to other student academic and student activities offered by the institution (e.g., other health care programs, athletics, clubs).

- **J4.** The clinical experience must allow students opportunities to practice with different patient populations and in different athletic or allied health care settings.
- **J5.** All clinical education sites where students are gaining clinical experience must be evaluated by the ATEP on an annual and planned basis.
- **J6.** At least 75% of the student's clinical experiences must occur under the direct supervision of an ACI or CI who is an ATC®.

Administering and Maintaining Accreditation

Section K: Program and Sponsoring Institution Responsibilities

The policies and procedures described in Sections K through M are subject to change. Programs will be notified prior to any policy or procedural changes.

K1. Accreditation

Initial or continuing accreditation actions occur on cycles that are no longer than five years for initial accreditation and seven years for continuing accreditation. The initiation of an accreditation cycle requires a comprehensive review to determine compliance with the Standards.

K1.1 Application for Accreditation

Currently-accredited programs or those requesting initial accreditation review must apply for a comprehensive review for accreditation on or before June 1st or September 15th of the year preceding the end of their accreditation cycle. Application materials must include:

- **K1.11** CAATE Application for Accreditation Services,
- K1.12 \$500 application fee, and
- **K1.13** Comprehensive self-study report.

K1.2 Accreditation Process

- **K1.21** Self-study documents submitted by an ATEP are reviewed by a designated Site Visit Team consisting of two qualified evaluators.
 - **K1.211** Failure to submit the required self-study documents within the designated time period will result in first a warning (30 days past deadline) for required submission, then revocation of accreditation at the end of the ATEP's accreditation cycle.
- **K1.22** A site visit team is identified by CAATE and assigned to the accreditation review for the ATEP.
- K1.23 The site visit team, consisting of at least two member representatives of the professional groups comprising the accreditation commission, will be forwarded the self study materials to review and compare to the Standards in advance of the site visit.
- K1.24 The site visit team will coordinate a two or three day on-site visit that includes an agenda for visit on dates agreeable to both parties. In the event that not all courses have been or are being taught and/or not all clinical components implemented by the time of the site visit, the request for a comprehensive accreditation review will be denied.
- **K1.25** Following the site visit, the Site Visit team will submit a preliminary report to a Review Committee team for review and assistance in consistent formatting.
- K1.26 The ATEP will receive a formal copy of the site visit team report and have 30 days to submit a rejoinder in response to the site visit team's findings to comment and provide clarification and/or additional data and correct factual errors.
- **K1.27** The site visit team and the Review Committee will review the rejoinder and make comments and recommendations to CAATE for action.
- **K1.28** Final accreditation action will be determined by CAATE, and the ATEP will be notified of that action.

K2. Administrative Requirements for Maintaining Accreditation – Accreditation bears with it certain institutional administrative responsibilities. Failure to meet any of the following administrative requirements may lead to administrative probationary action and ultimately to probation and the involuntary withdrawal of accreditation. Administrative probation is

ultimately to probation and the involuntary withdrawal of accreditation. Administrative probation rescinded immediately upon the rectification and verification that all deficiencies have been corrected and/or that fees have been paid. To maintain accreditation, the following actions are required:

- **K2.1** The Program must submit the *Self-Study* or, if requested, the required progress report within the timeframe determined by the CAATE based on the availability of specific documentation being requested.
- **K2.2** All CAATE-accredited programs must submit a self study and have an on-site review at least once every seven years.
- **K2.3** The institution's administration officials must inform CAATE of changes in all required Program personnel (e.g. Program Director, Clinical Instructor Educator, Medical Director) and/or Administrative personnel (e.g. President, Dean, Department Chair) within 30 days of the change.
- **K2.4** The sponsoring institution must inform CAATE of its intent to transfer program sponsorship in accordance with CAATE policy, including the completion of a new CAATE "Application for Accreditation Services" form. Applying for a transfer of sponsorship does not guarantee that transfer of accreditation will be granted.
- **K2.5** The program must pay CAATE fees within Net 60 days. Failure to submit payment will result in the program not being reviewed if applying for initial accreditation, or for continuing programs being placed on administrative probation.
- **K2.6** The sponsoring institution must inform CAATE in writing of any adverse decision affecting its institutional or state accreditation within 30 days of such action. Written notification must contain the administrative signature of the president/CEO.
- **K2.7** The sponsoring institution must inform CAATE in writing, within 30 days, of any intended substantive changes in the institution or program. Written notification must also contain an appropriate administrative signature of an administrator who has the authority to speak and act on behalf of the institution. Specific changes that must be reported include:
 - **K2.71** institution's mission or objectives if these will affect the program,
 - **K2.72** institution's legal status or form of control,
 - **K2.73** degree or credential level,

K2.8 Annual Reporting Requirements

The institution sponsoring the program must complete an annual report designed to document continued compliance with the Standards.

- **K2.81** An annual report must be submitted by the designated date.
 - **K2.811** Failure to submit the annual report as required will result in administrative probation.
 - **K2.812** Administrative Probation will be converted to Probation with a requirement for submission of additional materials, with the maximum penalty of a mandatory comprehensive review, if report is not received within sixty (60) days of the original submission deadline.
 - **K2.813** Programs submitting annual reports after the deadline will be required to participate in the audit process.
- **K2.82** Institutions self reporting a non-compliance(s) with one or more Standard(s) will be required to submit additional documentation, as requested by CAATE, demonstrating current compliance.
- **K2.83** Additional materials may be requested as needed by CAATE for verification or clarification.
- **K2.84** Failure to demonstrate compliance with the Standards included in the Annual Report will result in accreditation action.
- **K2.85** Failure to self-report, or fail to truthfully self-report non-compliance with the Standards will result in probation.
- **K2.86** Yearly, ten percent of the annual reports will be randomly selected for a

comprehensive audit of the Standards examined in the Annual Report.

Those programs submitting materials after the required deadline will be included in that 10% of programs audited

K2.861 Failure to provide requested audit materials or discovery of a misrepresentation will result in probation.

K2.9 Voluntary Withdrawal of Accreditation

Any institution sponsoring a program may request a voluntary withdrawal of accreditation from CAATE at any time. To initiate a voluntary withdrawal the institution must notify the CAATE executive office in writing of its desire to discontinue the program's accreditation status. The notification must:

- **K2.91** be signed by the president/CEO or an administrator who has the authority to speak and act on behalf of the institution,
- **K2.92** indicate when the last class of students graduated or will graduate,
- K2.93 the desired effective date of the voluntary withdrawal, and
- **K2.94** the location where all records for students who have completed the program will be kept.

Section L: Accreditation Actions

L1. Initial Accreditation

Initial accreditation refers to the first time a program receives accreditation through CAATE. The maximum length of initial accreditation is five (5) years.

L2. Continuing Accreditation

Accreditation status awarded to programs currently accredited by CAATE. The maximum length of continuing accreditation is seven (7) years.

L3. Probation

- **L3.1** Probationary actions are levied on currently accredited programs that fail to maintain compliance with the Standards.
- L3.2 If the recommendation of the CAATE is probation, then the sponsoring institution is provided the opportunity to request reconsideration within 15 days of notification or to demonstrate compliance with the designated Standard(s) within a specified time.
- L3.3 Reconsideration of a recommendation for probationary accreditation is based on conditions existing both when the Commission arrived at its recommendation and on subsequent documented evidence of corrected deficiencies provided by the institution.
- Failure to provide evidence documenting compliance with the designated Standard(s) may result in either a withdrawal of accreditation or require the submission of a comprehensive self-study and site visit at a time outside of the ATEP's normal accreditation cycle.

L4. Administrative Probation

- **L4.1** Administrative probationary actions are levied on currently accredited programs that fail to follow administrative requirements of an accredited program.
- **L4.2** Administrative probation may be converted to Probation within 60 days of non-response by the ATEP.
- **L4.3** CAATE awards of Probationary Accreditation are final and are not subject to appeal. However, the sponsoring institution may voluntarily withdraw its application for accreditation anytime prior to CAATE's action for probation.

L5. Withholding or Withdrawing Accreditation

L5.1 Before accreditation can be withheld or withdrawn, the CAATE must provide the sponsoring institution with the opportunity to request reconsideration within 15 days of notification. CAATE's reconsideration of a recommendation for

withholding or withdrawing accreditation is based on conditions existing both when the committee arrived at its recommendation and on subsequent documented evidence of corrected deficiencies provided by the institution. The sponsoring institution may choose to voluntarily withdraw its application for accreditation anytime prior to CAATE's final action.

- **L5.2** CAATE decisions to withhold or withdraw accreditation may be appealed. A copy of the CAATE Appeals Procedures for Withholding or Withdrawing Accreditation is enclosed with the letter of notification of negative accreditation actions.
- **L5.3** When accreditation is withheld or withdrawn, the sponsoring institution's chief executive officer is provided with a clear statement of each deficiency and is informed that if the institution chooses not to appeal that the institution may newly apply for accreditation once the program is believed to be in compliance with the accreditation Standards.

L.6 Tabled Action

On rare occasions, an accreditation action may be tabled to allow sufficient time for necessary documentation to be submitted. Tabled actions may not be used in situations where non-compliances with the Standards will negatively impact the students' education and/or health and safety.

Section M: Inactive Programs

- **M1.** A program may request inactive status from CAATE for up to, but not exceeding, two years. No students may be admitted or enrolled currently in an inactive program.
- **M2.** The institution is responsible to provide evidence that currently enrolled students have been notified of the inactive status and are still receiving the education delineated in the accreditation documents last received by CAATE.
- **M3.** To reactivate a program, the institution must inform CAATE in writing of its intent to do so and complete a limited report documenting the current status of the program.
- **M4.** The program and its sponsoring institution must continue to pay all required fees while inactive in order to maintain its accreditation status.
- **M5.** A program that does not enroll students for more than two years is considered discontinued and will have its accreditation involuntarily withdrawn.

Section N. Administration

- **N1.** All materials submitted to CAATE become the property of CAATE. Under no circumstances will property of CAATE be returned to an institution or to an individual.
- N2. The policies and procedures of CAATE are not contained wholly in this

 Document may be found in the Policy & Procedure Manual which is available on the CAATE
 website. Those policies and procedures included in Sections K-N, like all CAATE policies and
 procedures, are subject to review and revision by CAATE. All currently-accredited programs will
 be notified of changes to policies and/or procedures that affect accreditation at the time of the
 change.
- **N3.** All CAATE accreditation actions will be made available in a public forum and are required as part of the accreditation process.

Athletic Training Standards Glossary

Athletic Training Standards G		
Ability to Intervene	The CI or ACI is within the immediate physical vicinity and interact with the ATS on a regular and consistent basis in order to provide direction and correct inappropriate actions. The same as being "physically present."	
Academic Catalog/Bulletin	The official publication of the institution that describes the academic programs offered by the institution. This may be published electronically and/or in paper format.	
Academic Plan	The plan that encompasses all aspects of the student's academic classroom and clinical experiences.	
Adequate	Allows for the delivery of student education that does not negatively impact the quality or quantity of the education. Same as sufficient.	
Administrative Support Staff	Professional clerical and administrative personnel provided by the sponsoring institution. Professional clerical personnel may be supplemented, but not replaced, by student assistants.	
Affiliate (Affiliated Setting)	Institutions, clinics, or other health settings not under the authority of the sponsoring institution but that are used by the ATEP for clinical experiences.	
Affiliation Agreement	A formal, written document signed by administrative personnel, who have the authority to act on behalf of the institution or affiliate, from the sponsoring institution and affiliated site. Same as the memorandum of understanding.	
Allied Health Care Professional	Chiropractor, Dentist, Registered Dietician, Emergency Medical Technician, Nurse Practitioner, Nutritionist, Paramedic, Occupational Therapist, Optometrist, Orthotist, Pharmacist, Physical Therapist, Physician Assistant, Podiatrist, Prosthetist, Psychologist, Registered Nurse or Social Worker who hold a current active state or national practice credential and/or certification in the discipline and whose discipline provides direct patient care in a field that has direct relevancy to the practice and discipline of Athletic Training. These individuals may or may not hold formal appointments to the instructional faculty. Same as other health care professionals. (12-7-07)	
Approved Clinical Instructor (ACI)	An appropriately credentialed professional identified and trained by the program CIE to provide instruction and evaluation of the Athletic Training Educational Competencies and/or Clinical Proficiencies. The ACI may not be a current student within the ATEP. Please refer to the CAATE list of Allied Health Care Professionals' in the glossary and/or posted on the CAATE website.	
Appropriate Credential	An appropriate credential refers to a practice credential (i.e. a state license, state certification or state registration) that is required for the individual to practice his/her specific health care or medical profession within the state housing the ATEP. Where indicated, an appropriate credential is a required qualification of the program director, the medical director, approved clinical instructor (ACI), and the clinical instructor (CI) regardless of whether the individual is currently practicing his/her profession.	
ATEP	Athletic Training Education Program.	

ATEP Faculty	BOC Certified Athletic Trainers and other faculty who are	
7.121 Tabalty	responsible for classroom or sponsoring institution clinical	
	instruction in the athletic training major.	
Athletic Training	The facility designated as the primary site for the preparation,	
Facility/Clinic	treatment, and rehabilitation of athletes and those involved in	
_	physical activity.	
Athletic Training Student	A student enrolled in the athletic training major or graduate	
(ATS)	major equivalent.	
Clinical Coordinator	The individual a program may designate as having the primary	
	responsibilities for the coordination of the clinical experience	
	activities associated with the ATEP. The clinical coordinator	
	position is currently recommended, but not required by the	
Clinical Education	Standards.	
Clinical Education	The application of knowledge and skills, learned in classroom and laboratory settings, to actual practice on patients under the	
	supervision of an ACI/CI.	
Clinical Experiences	Those clinical education experiences for the Athletic Training	
Cimiodi Experiences	Student that involve patient care and the application of athletic	
	training skills under the supervision of a qualified instructor.	
Clinical Instruction Site	The location in which an ACI or CI interacts with the ATS for	
	clinical experiences. If the site is not in geographical proximity	
	to the ATEP, then there must be annual review and	
	documentation that the remote clinical site meets all	
	educational requirements.	
Clinical Instructor (CI)	An individual identified to provide supervision of athletic training	
	students during their clinical experience. An ACI may be a CI.	
	The ACI may not be a current student within the ATEP. Please refer to the CAATE list of Allied Health Care Professionals' in	
	the glossary and/or posted on the CAATE website.	
Clinical Instructor Educator	The BOC Certified Athletic Trainer recognized by the institution	
(CIE)	as the individual responsible for ACI training. If more than one	
	individual is recognized as a CIE for an ATEP, then at least one	
	of those individuals must be a BOC Certified Athletic Trainer.	
Clinical Plan	The plan that encompasses all aspects of the clinical education	
	and clinical experiences.	
Clinical Ratio	The ratio of ACI or CI to the number of athletic training	
	students. The ratio is calculated for all students assigned to the	
	instructor for the length of the experience or academic term. The ratio must not exceed eight students per instructor. If	
	directed observation students are providing direct patient care	
	or require supervision they must be included in this ratio.	
Communicable Disease	A policy, developed by the ATEP, consistent with the	
Policy	recommendations developed for other allied health	
_	professionals, that delineates the access and delimitations of	
	students infected with communicable diseases. Policy	
	guidelines are available through the CDC	
Contemporary Instructional	Instructional aids used by faculty and students including, but	
Aid	not limited to, computer software, AED trainers, and Epi-Pen	
0	trainers.	
Contemporary Information	Information formats used by faculty and students including	
Formats	electronic databases, electronic journals, digital audio/video,	
	and computer software.	

Didactic Instruction	See: Formal classroom and laboratory instruction.	
Direct Patient Care	The application of professional knowledge and skills in the provision of health care.	
Direct Supervision	Supervision of the athletic training student during clinical experience. The ACI and or CI must be physically present ar have the ability to intervene on behalf of the athletic training student and the patient.	
Directed Observation Athletic Training Student	A student who may be present in an athletic training facility, but not necessarily enrolled in the athletic training major, who is required to observe the practices of a Certified Athletic Trainer. This student may not provide direct patient care.	
Distance Education	Classroom and laboratory instruction accomplished with electronic media with the primary instructor at one institution and students at that institution and additional locations. Instruction may be via the internet, telecommunication, video link, or other electronic media. Distance education does not include clinical education or the participation in clinical experiences. Same as remote education.	
Equitable	Not exact but can be documented as comparable with other similar situations or resources.	
Expanded Subject Area	Subject matter that should constitute the academic "core" of the curriculum. It must include, but not be limited to the following areas: assessment of injury/illness, exercise physiology, first aid and emergency care, general medical conditions and disabilities, health care administration, human anatomy, human physiology, kinesiology/biomechanics, medial ethics and legal issues, nutrition, pathology of injury/illness, pharmacology, professional development and responsibilities, psychosocial intervention and referral, risk management and injury/illness prevention, strength training and reconditioning, statistics and research design, therapeutic exercise and rehabilitative techniques, therapeutic modalities, weight management and body composition.	
Formal Instruction	Teaching of required competencies and proficiencies with instructional emphasis in structured classroom and laboratory environment(s). Same as didactic instruction.	
Full-time Faculty	Recognized by the sponsoring institution as a full-time member of the faculty with all responsibilities and voting privileges as other designated full-time faculty and documented in institutional faculty delineations.	
Funding Opportunities	Opportunities for which students may participate for reimbursement, but that do not require the students to utilize athletic training skills, to replace qualified staff, and are not required of the academic program.	
General Medical Experience	Clinical experience that involves observation and interaction with physicians, nurse practitioners, and/or physician assistants where the majority of the experience involves general medical topics as those defined by the Athletic Training Educational Competencies.	
Geographic Proximity	Within a vicinity to allow for annual inspection, review, and documentation of meeting all academic requirements by the ATEP faculty/staff.	

	·
Learning Over Time (Mastery of Skills)	The process by which professional knowledge and skills are learned, integrated, and evaluated. This process involves initial formal instruction and evaluation of knowledge and skill as defined by the NATA Educational Competencies, followed by a time of sufficient length to allow for practice and integration of discrete knowledge and skill into a demonstration of comprehensive clinical (actual or simulated) proficiency. Clinical proficiencies must be evaluated by Approved Clinical Instructors (ACIs)
Major	In documents of the institution (catalogue, web pages, etc.) where majors are listed, athletic training must be listed as a major. The designation as a major must be consistent with institutional and system wide requirements.
Master Plan	The plan of the ATEP that encompasses all aspects of student education and learning in both the clinical and didactic settings.
Medical Director	The physician (MD or DO) who serves as a resource for the programs director and ATEP faculty regarding the medical content of the curriculum. The Medical Director may also be the team physician; however, there is no requirement for the Medical Director to participate in clinical education.
Memorandum of Understanding	See: Affiliation agreement.
Other Health Care Personnel	See: Allied health care personnel.
Outcome Assessment Instruments	The instruments used for program evaluations that are designed to collect data and feedback in regard to outcomes that relate to the ATEP mission, goals, and objectives of the program. Instruments also must be designed to collect data and feedback in regard to the effectiveness of program instruction relative to the Athletic Training Educational Competencies.
Outcomes	The effect that the ATEP has on the preparation of students as entry-level athletic trainers and the effectiveness of the program to meet its mission, goals, and objectives.
Physical Examination	An examination performed by an appropriate health care provider (MD,DO, PA, NP) to verify that the student is able to meet the physical and mental requirements (i.e., technical standards) with or without reasonable accommodation as defined by the ADA.
Physically Interact	See: Ability to intervene and physically present.
Physically Present	See: Ability to intervene.
Physician	A Medical Doctor (MD) as defined by the American Medical Association or a Doctor of Osteopathic Medicine (DO) as defined by the American Osteopathic Association.
Pre-Professional Student	A student who has not yet been admitted formally into the ATEP. May be required to participate in non-patient activities as described by the term Directed Observation Athletic Training

	Student.
Professional Development	Continuing education opportunities and professional enhancement, typically is offered through the participation in symposia, conferences, and in-services, that allow for the continuation of eligibility for professional credentials.
Program Director	The full-time faculty member of the host institution and a BOC Certified Athletic Trainer responsible for the administration and implementation of the ATEP.
Remote Education	See Distance education.
Service Work	Volunteer activities outside of the required clinical experiences (e.g., Special Olympics, State Games). If athletic training skills are part of this service work, then they must be supervised in those activities.
Sponsoring Institution	The college or university that awards the degree associated with the ATEP and offers the academic program in Athletic Training.
Sufficient	See: Adequate.
Team Physician	The physician (MD or DO) responsible for the provision of health care services for the student athlete. S/he may also be the medical director; however, this is not required by the Standards.
Technical Standards	The physical and mental skills and abilities of a student needed to fulfill the academic and clinical requirements of the ATEP. The standards promote compliance with the Americans with Disabilities Act (ADA) and must be reviewed by institutional legal counsel.

Appendix B



ATHLETIC TRAINING EDUCATIONAL COMPETENCIES

4TH EDITION

NATIONAL ATHLETIC Trainers' association

Athletic Training Educational Competencies

Fourth Edition

National Athletic Trainers' Association

2006

Table of Contents

Preface	•••••
Introduction	
Foundational Behaviors of Professional Practice	5
12 Content Areas:	
Risk Management and Injury Prevention	7
Pathology of Injuries and Illnesses	11
Orthopedic Clinical Examination and Diagnosis	13
Medical Conditions and Disabilities	17
Acute Care of Injuries and Illnesses	
Therapeutic Modalities	
Conditioning and Rehabilitative Exercise	29
Pharmacology	33
Psychosocial Intervention and Referral	
Nutritional Aspects of Injuries and Illnesses	
Health Care Administration	41
Professional Development and Responsibility	45
Comparison of 3 rd and 4 th Editions	
Table 1.	48
Table 2	56
Organization Contact Information	65

Preface

This document provides educational program personnel with the knowledge and skills to be mastered by students in an entry-level athletic training educational program. In this document, the National Athletic Trainers' Association Education Council has identified Athletic Training Educational Competencies and Clinical Proficiencies (Competencies) necessary for effective performance as an entry-level certified athletic trainer (ATC*). These Competencies provide the entry-level ATC* with the essential knowledge and skills needed to provide athletic training services to patients of differing ages and genders and work, and lifestyle circumstances and needs.

The Joint Review Committee on Educational Programs in Athletic Training (JRC-AT) requires that these Competencies be used for curriculum development and education of the student enrolled in an accredited entry-level educational program. Also, the Competencies serve as a guide for the development of educational programs and learning experiences leading to a student's eligibility to challenge the Board of Certification, Inc. examination. The Competencies are a companion document to the *Standards for the Accreditation of Entry-Level Educational Programs for the Athletic Trainer (Standards)*. After July 1, 2006, these Competencies will continue to assist the new accrediting agency, the Commission on Accreditation of Athletic Training Education—CAATE, as a companion document.

We acknowledge and thank the Entry Level Education Committee for their untiring efforts in revising this document to reflect the changing needs of athletic training students and educators. We also appreciate the advice and cooperation of the BOC and JRC-AT as this document has developed. Last we acknowledge the valuable input we received from NATA members-at-large who read and commented on the document during the public input phase of its development. Together we are improving health care by improving the education of future professionals.

NATA Education Council, January 2006

Introduction

This document is to be used as a guide by administrative, academic, and clinical program personnel when structuring the didactic and clinical education experience for students. Educational program personnel should recognize that the Competencies are minimum requirements for a student's entry-level education. Athletic training educational programs are encouraged to exceed these minimums to provide their students with the highest quality education possible. In addition, programs should employ innovative teaching and learning methodologies (in the classroom and clinical setting) whenever possible to further enhance professional preparation.

As a self-study guide, students preparing for careers in athletic training should find the list of Competencies helpful for evaluating their strengths and areas for improvement.

The Relationship Between the Educational Competencies and the Role Delineation Study

The Board of Certification, Inc. (BOC) regularly conducts a Role Delineation Study (RDS) within a sample of certified athletic trainers. These investigations determine the current role, or standards, of the profession. This process is often referred to as a "job analysis." The RDS establishes the minimal competencies to practice as an athletic trainer (AT) and thus reflects the contemporary standards of practice for the athletic training profession. The Educational Council considered the results of this study when developing these Competencies for clinical application. The basic purpose of the Competencies is to prepare the entry-level AT for current practices as defined by the RDS.

Although the Competencies and the RDS are two distinctly individual documents, both play a major role in the preparation of entry-level athletic trainers: the Competencies define the educational content that students enrolled in an accredited athletic training program must master; the RDS serves as the template for the certification examination that these students must successfully challenge to be recognized as certified athletic trainers.

The Education Council has taken great care to ensure that the content of the RDS has been included in the Competencies. However, close review of the two documents will indicate that the Competencies are broader and more specific than the knowledge and skills presented in the RDS. This mechanism ensures the continued growth of our profession and the heightened abilities of our future professionals.

Copies of the most recent BOC Role Delineation Study may be obtained by contacting the BOC (see contact information at the end of this document).

The Competencies as a Pedagogical Tool

The Competencies are categorized according to twelve content areas comprising the knowledge and skill set of the entry-level athletic trainer. Further, the Competencies are subcategorized according to the following behavioral classification:

- 1. Cognitive Competencies (knowledge and intellectual skills)
- 2. Psychomotor Competencies (manipulative and motor skills)
- 3. Clinical Proficiencies (decision-making and skill integration)

The Cognitive and Psychomotor Competencies are behavioral objectives classified predominantly at the recall and application level of Bloom's Taxonomy. As students become competent with this level of knowledge and skill, program personnel are encouraged to challenge students to demonstrate the Cognitive and Psychomotor Competencies at the analysis level of Bloom's Taxonomy. The Clinical Proficiencies integration of decision-making and critical thinking provides students with the additional means to demonstrate knowledge and skill at the analysis level of Bloom's Taxonomy.

The Competencies serve as instructional goals that program personnel should use to structure the overall curriculum. Program personnel should then break down these goals into learning objectives that would comprise the discreet components of individual courses and clinical experiences. These objectives constitute a contract between the instructor and their students about:

- 1. What the student can be expected to be taught
- 2. What the student will be expected to learn
- 3. How, and over what, students will be tested/evaluated

When writing learning objectives for presentation on a course syllabus and as a pedagogical tool, there are certain "rules" that should be followed. Properly constructed learning objectives should include four parts:

- 1. The Audience—who will learn the information
- 2. The Behavior—what will be learned
- 3. Any Conditions—what resources will be available to the learner, or not available, to accomplish the objective
- 4. The Degree—to what level students will have to demonstrate their learning

The Competencies Are Not the Only Things a Student Must Learn

Inherent in this document is the understanding that a comprehensive basic and applied science background is needed for students to develop appropriate levels of professional competence in the discipline-specific knowledge and skills described in this document. Additional coursework may include, but is not limited to, chemistry, biology, physics, physiology, psychology, and statistics.

What Is New in the 4th Edition

A major change in this edition of the Competencies is related to the Affective Domain (3rd Edition). The competencies previously associated with the Affective Domain have been distilled and synthesized to create the Foundational Behaviors of Professional Practice (Behaviors). Because the entry-level credential signifies that the holder is a practitioner prepared for entry into the practice of athletic training, Behaviors should be infused into every aspect of students education in order to prepare them for this public trust. While some specific Behaviors can be easily defined and presented, students may see applications repeatedly but be unable to demonstrate or modify their behavior because of the roles they are allowed to assume. Other Behaviors are demonstrated by classroom and clinical educators to expose the students to the desired behavior, and yet these behaviors may not be practiced by students (professionals-in-training) because of the nature of their roles and responsibilities. While educators may be able to measure a student's understanding of behavioral concepts, it is most likely the true measure of a student's emulation of these Behaviors will occur in the clinical setting with patients to whom he or she has a duty. Our expectations in presenting Behaviors in this document is to guide the global design of curricular planning, realizing that many of these Foundational Behaviors of Professional Practice will be achieved to their fullest extent when a student becomes a certified athletic trainer and has been practicing for some time.

Proficient vs Clinical Proficiency

Don't confuse the terms Clinical Proficiencies, proficient, and mastery. Proficient means to "perform with expert correctness and facility," a verb. Clinical Proficiencies, as presented here, are a listing of the student's clinical training before entering the profession, a set of decision making skills, a noun. Mastery means "to have comprehensive knowledge or command of a subject or skill."

Students should become proficient in the Clinical Proficiencies. Stated another way, students should achieving an expert level of performance on each item of the decision-making skill-set. To do so requires both preparation and redundancy. The Clinical Proficiencies are based on the Cognitive and Psychomotor Competencies of that content area. So students must demonstrate a command of the knowledge and skills of the Cognitive and Psychomotor Competencies in preparation for demonstrating competency on the Clinical Competencies.

This implies that a one-time "check off" cannot ensure that the student has achieved this mastery level of performance. Just like all the Competencies have to be relearned and practiced periodically for the athletic trainer to continue to grow and improve, so do the Clinical Proficiencies need to be practiced and refined multiple times over the course of a students' education, and beyond, to ensure that the athletic trainer is truly performing with expert correctness and facility.

Students may master individual Competencies and Clinical Proficiencies, but this will not make them master clinicians. Becoming a master clinician will require additional

knowledge, skills, and experience beyond these entry-level Competencies and Clinical Proficiencies.

Sequenced, integrated, depth of learning, known in our field as Learning-Over-Time, is a learning that begins with introductory or basic knowledge (the Cognitive Competencies), basic skills (the Psychomotor Competencies), and basic behaviors (the Foundational Behaviors of Professional Practice). Knowledge and skills are normally taught and evaluated in the classroom and laboratory settings. Behaviors are identified, discussed, and practiced from the time students begin clinical studies. Once students independently demonstrate a competent level of knowledge and/or skill, they can begin to incorporate that training safely into their clinical experiences. This begins a cycle of learning, feedback, refinement, and more advanced learning. Practice with concepts by gaining clinical experience with "real life" applications readies the student for occasions where they demonstrate their decision-making and skill integration ability, Clinical Proficiencies. The Clinical Proficiencies are a measure of "real life" application. Students should be assessed in their performance of Clinical Proficiencies on actual patients. If this is not possible, standardized/simulated patients or scenarios should be used to measure student proficiency.

Knowledge and Skill Should Reflect Current Knowledge and Practice

It is incumbent on any educational program to present its students with the most current and up-to-date knowledge and skills. This is especially important in an allied health care profession such as athletic training where protection of the public and continuing competence are critical to professional practice. This does not mean the competencies change, but the way they are taught, presented and applied may change. Program personnel should strive to include content and skills that reflect evidence-based knowledge and practice in all aspects of students educational program, including students clinical experiences. Because the knowledge within a profession is dynamic, information of current practice, as represented by appropriate position statements of various professional associations/organizations, should be incorporated into the curriculum in a timely and accurate fashion. Current practice particularly applies to position statements issued by the National Athletic Trainers' Association, Inc.

Foundational Behaviors of Professional Practice

These basic behaviors permeate every aspect of professional practice and should be incorporated into instruction in every part of the educational program. The behaviors in this section comprise the application of the common values of the athletic training profession.

Primacy of the Patient

- Recognize sources of conflict of interest that can impact the patient's health
- Know and apply the commonly accepted standards for patient confidentiality
- Provide the best health care available for the patient
- Advocate for the needs of the patient

Teamed Approach to Practice

- Recognize the unique skills and abilities of other health care professionals
- Understand the scope of practice of other health care professionals
- Understand and execute duties within the identified scope of practice for athletic trainers
- Include the patient (and family, where appropriate) in the decision making process
- Demonstrate the ability to work with others in effecting positive patient outcomes

Legal Practice

- Practice athletic training in a legally competent manner
- Recognize the need to document compliance with the laws that govern athletic training
- Understand the consequences of violating the laws that govern athletic training

Ethical Practice

- Understand and comply with NATA's *Code of Ethics* and the BOC's *Standards of Practice*
- Understand the consequences of violating NATA's *Code of Ethics* and BOC's *Standards of Practice*
- Understand and comply with other codes of ethics, as applicable

Advancing Knowledge

- · Critically examine the body of knowledge in athletic training and related fields
- Use evidence-based practice as a foundation for the delivery of care
- Understand the connection between continuing education and the improvement of athletic training practice
- · Promote the value of research and scholarship in athletic training

• Disseminate new knowledge in athletic training to fellow athletic trainers, patients, other health care professionals, and others as necessary

Cultural Competence

- Understand the cultural differences of patients' attitudes and behaviors toward health care
- Demonstrate knowledge, attitudes, behaviors, and skills necessary to achieve optimal health outcomes for diverse patient populations.
- Demonstrate knowledge, attitudes, behaviors, and skills necessary to work respectfully and effectively with diverse populations and in a diverse work environment

Professionalism

- Advocate for the profession
- Demonstrate honesty and integrity
- Exhibit compassion and empathy
- · Demonstrate effective interpersonal communication skills

Risk Management and Injury Prevention (RM)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess an understanding of risk management and injury prevention and demonstrate the necessary skills to plan and implement prevention strategies. The use of learning objectives and outcomes to support the identification of injury and illness risk factors and to plan and implement a risk management and prevention program ensures that the student is able to:

Cognitive Competencies

- 1. Explain the risk factors associated with physical activity.
- 2. Identify and explain the risk factors associated with common congenital and acquired abnormalities, disabilities, and diseases.
- 3. Identify and explain the epidemiology data related to the risk of injury and illness related to participation in physical activity.
- 4. Identify and explain the recommended or required components of a preparticipation examination based on appropriate authorities' rules, guidelines, and/or recommendations.
- 5. Describe the basic concepts and practice of wellness screening.
- 6. Describe the general principles of health maintenance and personal hygiene, including skin care, dental hygiene, sanitation, immunizations, avoidance of infectious and contagious diseases, diet, rest, exercise, and weight control.
- 7. Explain the importance for all personnel to maintain current certification in CPR, automated external defibrillator (AED), and first aid.
- 8. Explain the principles of effective heat loss and heat illness prevention programs. Principles include, but are not limited to, knowledge of the body's thermoregulatory mechanisms, acclimation and conditioning, fluid and electrolyte replacement requirements, proper practice and competition attire, and weight loss.

- 9. Explain the accepted guidelines, recommendations, and policy and position statements of applicable governing agencies related to activity during extreme weather conditions.
- 10. Interpret data obtained from a wet bulb globe temperature (WGBT) or other similar device that measures heat and humidity to determine the scheduling, type, and duration of activity.
- 11. Explain the importance and use of standard tests, test equipment, and testing protocol for the measurement of cardiovascular and respiratory fitness, body composition, posture, flexibility, muscular strength, power, and endurance.
- 12. Explain the components and purpose of periodization within a physical conditioning program.
- 13. Identify and explain the various types of flexibility, strength training, and cardiovascular conditioning programs. This should include the expected effects (the body's anatomical and physiological adaptation), safety precautions, hazards, and contraindications of each.
- 14. Explain the precautions and risks associated with exercise in special populations.
- 15. Describe the components for self-identification of the warning signs of cancer.
- 16. Explain the basic principles associated with the use of protective equipment, including standards for the design, construction, fit, maintenance and reconditioning of protective equipment; and rules and regulations established by the associations that govern the use of protective equipment; and material composition.
- 17. Explain the principles and concepts related to prophylactic taping, wrapping, bracing, and protective pad fabrication.
- 18. Explain the principles and concepts related to the fabrication, modification, and appropriate application or use of orthotics and other dynamic and static splints. This includes, but is not limited to, evaluating or identifying the need, selecting the appropriate manufacturing material, manufacturing the orthosis or splint, and fitting the orthosis or splint.
- 19. Explain the basic principles and concepts of home, school, and workplace ergonomics and their relationship to the prevention of illness and injury.
- 20. Recognize the clinical signs and symptoms of environmental stress.

Psychomotor Competencies

- 1. Instruct the patient how to properly perform fitness tests to assess his or her physical status and readiness for physical activity Interpret the results of these tests according to requirements established by appropriate governing agencies and/or a physician. These tests should assess:
 - Flexibility
 - Strength
 - Power
 - Muscular endurance
 - Agility
 - · Cardiovascular endurance
 - Speed
- 2. Develop a fitness program appropriate to the patient's needs and selected activity or activities that meet the requirements established by the appropriate governing agency and/or physician for enhancing:
 - Flexibility
 - Strength
 - Power
 - Muscular endurance
 - Agility
 - · Cardiovascular endurance
 - Speed
- 3. Instruct a patient regarding fitness exercises and the use of weight training equipment to include correction or modification of inappropriate, unsafe, or dangerous lifting techniques.
- 4. Select and fit appropriate standard protective equipment on the patient for safe participation in sport and/or physical activity. This includes but is not limited to:
 - Shoulder pads
 - · Helmet/headgear
 - Footwear
 - · Mouth guard
 - Prophylactic knee brace
 - Prophylactic ankle brace
 - Other equipment, as appropriate
- 5. Select, fabricate, and apply appropriate preventive taping and wrapping procedures, splints, braces, and other special protective devices. Procedures and devices should be consistent with sound anatomical and biomechanical principles.
- 6. Obtain, interpret, and make decisions regarding environmental data. This includes, but is not limited to the ability to:

- Operate a sling psychrometer and/or wet bulb globe index
- Formulate and implement a comprehensive, proactive emergency action plan specific to lightening safety
- · Access local weather/environmental information
- Assess hydration status using weight charts, urine color charts, or specific gravity measurements

Clinical Proficiency #1

Plan, implement, evaluate, and modify a fitness program specific to the physical status of the patient. This will include instructing the patient in proper performance of the activities and the warning signs and symptoms of potential injury that may be sustained. Effective lines of communication shall be established to elicit and convey information about the patient's status and the prescribed program. While maintaining patient confidentiality, all aspects of the fitness program shall be documented using standardized record-keeping methods.

Clinical Proficiency #2

Select, apply, evaluate, and modify appropriate standard protective equipment and other custom devices for the patient in order to prevent and/or minimize the risk of injury to the head, torso, spine and extremities for safe participation in sport and/or physical activity. Effective lines of communication shall be established to elicit and convey information about the patient's situation and the importance of protective devices to prevent and/or minimize injury.

Clinical Proficiency #3

Demonstrate the ability to develop, implement, and communicate effective policies and procedures to allow safe and efficient physical activity in a variety of environmental conditions. This will include obtaining, interpreting, and recognizing potentially hazardous environmental conditions and making the appropriate recommendations for the patient and/or activity. Effective lines of communication shall be established with the patient, coaches and/or appropriate officials to elicit and convey information about the potential hazard of the environmental condition and the importance of implementing appropriate strategies to prevent injury.

Pathology of Injuries and Illnesses (PA)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess an understanding of the cellular events and reactions and other pathological mechanisms in the development, progression and epidemiology of injuries, illnesses and diseases. The use of learning objectives and outcomes in the pathology of injury and illness ensures that the student is able to:

Cognitive Competencies

- 1. Describe the essential components of a typical human cell. Include the normal structure and the function of each component and explain the abnormal symptoms associated with injury, illness, and disease.
- 2. Explain gross cellular adaptations in response to stress, injury, or disease (e.g., atrophy, hypertrophy, differentiation, hyperplasia, metaplasia, and tumors).
- 3. Explain normal and abnormal circulation and the physiology of fluid homeostasis.
- 4. Identify the normal acute and chronic physiological and pathological responses (e.g., inflammation, immune response, and healing process) of the human body to trauma, hypoxia, microbiologic agents, genetic derangements, nutritional deficiencies, chemicals, drugs, and aging affecting the musculoskeletal and other organ systems, and musculoskeletal system adaptations to disuse.
- 5. Describe the etiology, pathogenesis, pathomechanics, signs, symptoms, and epidemiology of common orthopedic injuries, illnesses and diseases to the body's systems.
- 6. Describe the body's responses to physical exercise during common diseases, illnesses, and the injury.

Orthopedic Clinical Examination and Diagnosis (DI)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess the ability to clinically examine and diagnose a patient for the purpose of identifying (a) common acquired or congenital risk factors that would predispose the patient to injury and (b) musculoskeletal orthopedic injuries to determine proper care including the referral of the patient to other health care providers when appropriate.

The Cognitive and Psychomotor Competencies and Clinical Proficiency in this section should encompass the following body areas:

- a. foot and toes
- b. ankle
- c. lower leg
- d. knee (tibiofemoral and patellofemoral)
- e. thigh
- f. hip/pelvis/sacroiliac joint
- g. lumbar spine
- h. thoracic spine
- i. ribs
- j. cervical spine
- k. shoulder girdle
- 1. upper arm
- m. elbow
- n. forearm
- o. wrist
- p. hand, fingers and thumb
- q. head and face
- r. temporomandibular joint

The use of learning objectives and outcomes in orthopedic clinical examination and diagnosis ensures that the student is able to:

Cognitive Competencies

- 1. Demonstrate knowledge of the systems of the human body.
- 2. Describe the anatomical and physiological growth and development characteristics as well as gender differences across the lifespan.

- 3. Describe the physiological and psychological effects of physical activity and their impact on performance.
- 4. Explain directional terms and cardinal planes used to describe the body and the relationship of its parts.
- 5. Describe the principles and concepts of body movement including functional classification of joints, arthrokinematics, normal ranges of joint motion, joint action terminology, and muscle groups responsible for joint actions (prime movers, synergists), skeletal muscle contraction, and kinesthesis/proprioception.
- 6. Describe common techniques and procedures for evaluating common injuries including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques, and neurological and circulatory tests.
- 7. Explain the relationship of injury assessment to the systematic observation of the person as a whole.
- 8. Describe the nature of diagnostic tests of the neurological function of cranial nerves, spinal nerves, and peripheral nerves using myotomes, dermatomes, and reflexes.
- 9. Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.
- 10. Explain the roles of special tests in injury assessment.
- 11. Explain the role of postural examination in injury assessment including gait analysis.
- 12. Describe strength assessment using resistive range of motion, break tests, and manual muscle testing.
- 13. Describe the use of diagnostic tests and imaging techniques based on their applicability in the assessment of an injury when prescribed by a physician.
- 14. Describe the clinical signs and symptoms of environmental stress.
- 15. Describe and identify postural deformities.
- 16. Explain medical terminology and abbreviations necessary to communicate with physicians and other health professionals.
- 17. Describe the components of medical documentation (e.g. SOAP, HIPS and HOPS).

Psychomotor Competencies

- 1. Obtain a medical history of the patient that includes a previous history and a history of the present injury.
- 2. Perform inspection/observation of the clinical signs associated with common injuries including deformity, posturing and guarding, edema/swelling, hemarthrosis, and discoloration.
- 3. Perform inspection/observation of postural, structural, and biomechanical abnormalities.
- 4. Palpate the bones and soft tissues to determine normal or pathological characteristics.
- 5. Measure the active and passive joint range of motion using commonly accepted techniques, including the use of a goniometer and inclinometer.
- 6. Grade the resisted joint range of motion/manual muscle testing and break tests.
- 7. Apply appropriate stress tests for ligamentous or capsular stability, soft tissue and muscle, and fractures.
- 8. Apply appropriate special tests for injuries to the specific areas of the body as listed above.
- 9. Assess neurological status, including cranial nerve function, myotomes, dermatomes and reflexes, and circulatory status.
- 10. Document the results of the assessment including the diagnosis.

Clinical Proficiency

Demonstrate a musculoskeletal assessment of upper extremity, lower extremity, head/face, and spine (including the ribs) for the purpose of identifying (a) common acquired or congenital risk factors that would predispose the patient to injury and (b) a musculoskeletal injury. This will include identification and recommendations for the correction of acquired or congenital risk factors for injury. At the conclusion of the assessment, the student will diagnose the patient's condition and determine and apply immediate treatment and/or referral in the management of the condition. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the assessment should be documented using standardized record-keeping methods.

Medical Conditions and Disabilities (MC)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess an understanding of medical conditions and disabilities associated with physically active individuals.

The cognitive and psychomotor competencies and clinical proficiency should encompass the following body areas:

- a. derma
- b. head, including the brain
- c. face, including maxillofacial region
- d. thorax, including the heart and lungs
- e. abdomen, including the abdominal organs, the renal and urogenital systems
- f. eyes
- g. ear, nose, and throat

The use of learning objectives and outcomes to support recognition and detection, referral, and understanding treatment approaches for medical conditions and disabilities ensures that the student is able to:

Cognitive Competencies

- 1. Describe and know when to refer common congenital or acquired abnormalities, physical disabilities, and diseases affecting people who engage in physical activity throughout their life span (e.g., arthritis, diabetes).
- 2. Understand the effects of common illnesses and diseases in physical activity.
- 3. Describe common techniques and procedures for evaluating common medical conditions and disabilities including taking a history, inspection/observation, palpation, functional testing, special evaluation techniques (e.g., assessing heart, lung and bowel sounds), and neurological and circulatory tests.
- 4. Describe and know when to refer common eye pathologies from trauma and/or localized infection (e.g., conjunctivitis, hyphema, corneal injury, stye, scleral trauma).
- 5. Describe and know when refer common ear pathologies from trauma and/or localized infection (e.g., otitis, ruptured tympanic membrane, impacted cerumen).

- 6. Describe and know when to refer common pathologies of the mouth, sinus, oropharynx, and nasopharynx from trauma and/or localized infection (e.g., gingivitis, sinusitis, laryngitis, tonsillitis, pharyngitis).
- 7. Describe and know when to refer common and significant respiratory infections, thoracic trauma, and lung disorders. (e.g., influenza, pneumonia, bronchitis, rhinitis, sinusitis, upper-respiratory infection (URI), pneumothorax, hemothorax, pneumomediastinum, exercise-induced bronchospasm, exercise-induced anaphylaxis, asthma).
- 8. Explain the importance and proper use of a peak flowmeter or similar device in the evaluation and management of respiratory conditions.
- 9. Describe strategies for reducing the frequency and severity of asthma attacks.
- 10. Explain the possible causes of sudden death syndrome.
- 11. Describe and know when to refer common cardiovascular and hematological medical conditions from trauma, deformity, acquired disease, conduction disorder, and drug abuse (e.g., coronary artery disease, hypertrophic cardiomyopathy, heart murmur, mitral valve prolapse, commotion cordis, Marfan's syndrome, peripheral embolism, hypertension, arrythmogenic right venricular dysplasia, Wolf-Parkinson-White syndrome, anemias, sickle cell anemia and sickle cell trait [including rhabdomyolysis], hemophilia, deep vein thrombosis, migraine headache, syncope).
- 12. Describe and know when to refer common medical conditions that affect the gastrointestinal and hepatic-biliary systems from trauma, chemical and drug irritation, local and systemic infections, psychological stress, and anatomic defects (e.g., hepatitis, pancreatitis, dyspepsia, gastroesophageal reflux, peptic ulcer, gastritis and gastroenteritis, inflammatory bowel disease, irritable bowel syndrome, appendicitis, sports hernia, hemorrhoids, splenomegaly, liver trauma).
- 13. Describe and know when to refer common medical conditions of the endocrine and metabolic systems from acquired disease and acute and chronic nutritional disorders (e.g., diabetes mellitus and insipidus, hypothyroidism, Cushing's syndrome, thermoregulatory disorders, gout, osteoporosis).
- 14. Describe and know when to refer common medical conditions of the renal and urogenital systems from trauma, local infection, congenital and acquired disease, nutritional imbalance, and hormone disorder (e.g., kidney stones, genital trauma, gynecomastia, monorchidism, scrotum and testicular trauma, ovarian and testicular cancer, breast cancer, testicular torsion, varicoceles, endometriosis, pregnacy and ectopic pregnancy, female athlete triad, primary amenorrhea, oligomenorrhea, dysmenorrhea, kidney laceration or contusion, cryptorchidism).

- 15. Describe and know when to refer common and/or contagious skin lesions from trauma, infection, stress, drug reaction, and immune responses (e.g., wounds, bacteria lesions, fungal lesions, viral lesions, bites, acne, eczema dermatitis, ringworm).
- 16. Describe and know when to refer common medical conditions of the immune system from infection, congenital and acquired disease, and unhealthy lifestyle. (e.g., arthritis, gout, upper respiratory tract infection [URTI], influenza, pneumonia, myocarditis, gastrointestinal infection, urinary tract infection [UTI], sexually transmitted diseases [STDs], pelvic inflammatory disease, meningitis, osteomyelitis, septic arthrosis, chronic fatigue and overtraining, infectious mononucleosis, human immunodeficiency virus (HIV) infection and AIDS, hepatitis B virus infection, allergic reaction and anaphylaxis, childhood infectious diseases [measles, mumps, chickenpox]).
- 17. Describe and know when to refer common neurological medical disorders from trauma, anoxia, drug toxicity, infection, and congenital malformation (e.g., concussion, postconcussion syndrome, second-impact syndrome, subdural and epidural hematoma, epilepsy, seizure, convulsion disorder, meningitis, spina bifida, cerebral palsy, chronic regional pain syndrome [CRPS], cerebral aneurysm).
- 18. Describe and know when to refer common psychological medical disorders from drug toxicity, physical and emotional stress, and acquired disorders (e.g., substance abuse, eating disorders/disordered eating, depression, bipolar disorder, seasonal affective disorder, anxiety disorders, somatoform disorders, personality disorders, abusive disorders, and addiction).
- 19. Describe a plan to access appropriate medical assistance on disease control, notify medical authorities, and prevent disease epidemics.
- 20. Describe and know when to refer common cancers (e.g., testicular, breast).
- 21. Describe and know when to refer common injuries or conditions of the teeth (e.g., fractures, dislocations, caries).
- 22. Explain the importance and proper procedures for measuring body temperature (e.g., oral, axillary, rectal).

Psychomotor Competencies

- 1. Obtain a medical history of the patient that includes a previous history and a history of the present condition.
- 2. Perform a visual observation of the clinical signs associated with common injuries and/or illnesses including deformity, edema/swelling, discoloration, and skin abnormalities.

- 3. Palpate the bones and soft tissues, including the abdomen, to determine normal or pathological characteristics.
- 4. Apply commonly used special tests and instruments (e.g., otoscope, stethoscope, ophthalmoscope, peak flowmeter, chemical "dipsticks" [or similar devices]) and document the results for the assessment of:
 - a. Vital signs including respiration (including asthma), pulse and circulation, and blood pressure
 - b. Heart, lung, and bowel sounds
 - c. Pupil response, size and shape, and ocular motor function
 - d. Body temperature
 - e. Ear, nose, throat and teeth
 - f. Urinalysis

Clinical Proficiency

Demonstrate a general and specific (e.g., head, torso and abdomen) assessment for the purpose of (a) screening and referral of common medical conditions, (b) treating those conditions as appropriate, and (c) when appropriate, determining a patient's readiness for physical activity. Effective lines of communication should be established to elicit and convey information about the patient's status and the treatment program. While maintaining confidentiality, all aspects of the assessment, treatment, and determination for activity should be documented using standardized record-keeping methods.

Acute Care of Injuries and Illnesses (AC)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must recognize, assess, and treat patients with acute injuries and illnesses and provide appropriate medical referral. The use of learning objectives and outcomes in acute care of injuries and illnesses ensures that the student is able to:

Cognitive Competencies

- 1. Explain the legal, moral, and ethical parameters that define the scope of first aid and emergency care and identify the proper roles and responsibilities of the certified athletic trainer.
- 2. Describe the availability, content, purpose, and maintenance of contemporary first aid and emergency care equipment.
- 3. Determine what emergency care supplies and equipment are necessary for circumstances in which the athletic trainer is the responsible first responder.
- 4. Know and be able to use appropriately standard nomenclature of injuries and illnesses.
- 5. Describe the principles and rationale of the initial assessment including the determination of whether the accident scene is safe, what may have happened, and the assessment of airway, breathing, circulation, level of consciousness and other life-threatening conditions.
- 6. Differentiate the components of a secondary assessment to determine the type and severity of the injury or illness sustained.
- 7. Identify the normal ranges for vital signs.
- 8. Describe pathological signs of acute/traumatic injury and illness including, but not limited to, skin temperature, skin color, skin moisture, pupil reaction, and neurovascular function.
- 9. Describe the current standards of first aid, emergency care, rescue breathing, and cardiopulmonary resuscitation for the professional rescuer.

- 10. Describe the role and function of an automated external defibrillator in the emergency management of acute heart failure and abnormal heart rhythms.
- 11. Describe the role and function of supplemental oxygen administration as an adjunct to cardiopulmonary resuscitation techniques.
- 12. Describe the characteristics of common life-threatening conditions that can occur either spontaneously or as the result of direct trauma to the throat, thorax and viscera, and identify the management of these conditions.
- 13. Describe the proper management of external hemorrhage, including the location of pressure points, use of universal precautions, and proper disposal of biohazardous materials.
- 14. Identify the signs and symptoms associated with internal hemorrhaging.
- 15. Describe the appropriate use of aseptic or sterile techniques, approved sanitation methods, and universal precautions for the cleansing and dressing of wounds.
- 16. Describe the injuries and illnesses that require medical referral.
- 17. Explain the application principles of rest, cold application, elevation, and compression in the treatment of acute injuries.
- 18. Describe the signs, symptoms, and pathology of acute inflammation.
- 19. Identify the signs and symptoms of head trauma, including loss of consciousness, changes in standardized neurological function, cranial nerve assessment, and other symptoms that indicate underlying trauma.
- 20. Explain the importance of monitoring a patient following a head injury, including obtaining clearance from a physician before further patient participation.
- 21. Define *cerebral concussion*, list the signs and symptoms of concussions, identify the methods for determining the neurocognitive status of a patient who sustains a concussion and describe contemporary concepts for the management and return-to-participation of a patient who sustains a concussion.
- 22. Identify the signs and symptoms of trauma to the cervical, thoracic and lumbar spines, the spinal cord, and spinal nerve roots, including neurological signs, referred symptoms, and other symptoms that indicate underlying trauma and pathology.
- 23. Describe cervical stabilization devices that are appropriate to the circumstances of an injury.

- 24. Describe the indications, guidelines, proper techniques and necessary supplies for removing equipment and clothing in order to evaluate and/or stabilize the involved area.
- 25. Describe the effective management, positioning, and immobilization of a patient with a suspected spinal cord injury.
- 26. Identify the appropriate short-distance transportation method, including immobilization, for an injured patient.
- 27. Identify the signs, symptoms, possible causes, and proper management of the following:
 - a. Different types of shock
 - b. Diabetic coma
 - c. Seizures
 - d. Toxic drug overdose
 - e. Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites)
- 28. Identify the signs and symptoms of serious communicable diseases and describe the appropriate steps to prevent disease transmission.
- 29. Identify the signs, symptoms, and treatment of patients suffering from adverse reactions to environmental conditions.
- 30. Identify information obtained during the examination to determine when to refer an injury or illness for further or immediate medical attention.
- 31. Describe the proper immobilization techniques and select appropriate splinting material to stabilize the injured joint or limb and maintain distal circulation.
- 32. Describe the proper ambulatory aid and technique for the injury and patient.
- 33. Describe home care and self-treatment plans of acute injuries and illnesses.

- 1. Survey the scene to determine whether the area is safe and determine what may have happened.
- 2. Perform an initial assessment to assess the following, but not limited to:
 - a. Airway
 - b. Breathing
 - c. Circulation
 - d. Level of consciousness
 - e. Other life-threatening conditions

- 3. Implement appropriate emergency treatment strategies, including but not limited to:
 - a. Activate an emergency action plan
 - b. Establish and maintain an airway in an infant, child, and adult
 - c. Establish and maintain an airway in a patient wearing shoulder pads, headgear or other protective equipment and/or with a suspected spine injury
 - d. Perform one- and two-person CPR on an infant, child, and adult
 - e. Utilize a bag-valve mask on an infant, child, and adult
 - f. Utilize an automated external defibrillator (AED) according to current accepted practice protocols
 - g. Normalize body temperature in situations of severe/life-threatening heat or cold stress
 - h. Control bleeding using universal precautions
 - i. Administer an EpiPen for anaphylactic shock
- 4. Perform a secondary assessment and employ the appropriate management techniques for non-life-threatening situations, including but not limited to:
 - a. Open and closed wounds (using universal precautions)
 - b. Closed-head trauma (using standard neurological tests and tests for cranial nerve function)
 - c. Environmental illness
 - d. Seizures
 - e. Acute asthma attack
 - f. Different types of shock
 - g. Thoracic, respiratory, and internal abdominal injury or illness
 - h. Acute musculoskeletal injuries (i.e. sprains, strains, fractures, dislocations)
 - i. Spinal cord and peripheral nerve injuries
 - i. Diabetic coma
 - k. Toxic drug overdose
 - l. Allergic, thermal, and chemical reactions of the skin (including infestations and insect bites

Clinical Proficiency

Demonstrate the ability to manage acute injuries and illnesses. This will include surveying the scene, conducting an initial assessment, utilizing universal precautions, activating the emergency action plan, implementing appropriate emergency techniques and procedures, conducting a secondary assessment and implementing appropriate first aid techniques and procedures for non-life-threatening situations. Effective lines of communication should be established and the results of the assessment, management and treatment should be documented.

Therapeutic Modalities (TM)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must plan, implement, document, and evaluate the efficacy of therapeutic modalities in the treatment of injuries to and illnesses of their patients.

The cognitive and psychomotor competencies and clinical proficiency should encompass multiple methods of therapeutic modalities in the following categories:

- a. Infrared modalities
- b. Electrical stimulation modalities
- c. Therapeutic ultrasound
- d. Mechanical modalities
- e. Massage and other manual treatment techniques

The use of learning objectives and outcomes in therapeutic modalities ensures that the student is able to:

- 1. Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the selection and application of therapeutic modalities used in a treatment and/or rehabilitation program.
- 2. Explain the principles of physics, including basic concepts associated with the electromagnetic and acoustic spectra (e.g., frequency, wavelength) associated with therapeutic modalities.
- 3. Explain the terminology, principles, basic concepts, and properties of electric currents as they relate to therapeutic modalities.
- 4. Describe contemporary pain-control theories.
- 5. Describe the role and function of the common pharmacological agents that are used in conjunction with therapeutic modalities
- 6. Explain the body's physiological responses during and following the application of therapeutic modalities.

- 7. Describe the electrophysics, physical properties, biophysics, patient preparation and modality set-up (parameters), indications, contraindications, and specific physiological effects associated with commonly used therapeutic modalities.
- 8. Identify appropriate therapeutic modalities for the treatment and rehabilitation of injuries and illness.
- 9. Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate readiness to return to the appropriate level of activity. This includes the ability to:
 - a. Describe and interpret appropriate measurement and assessment procedures as they relate to the selection and application of therapeutic modalities.
 - b. Interpret objective measurement results as a basis for developing individualized therapeutic modality application and set-up (parameters).
 - c. Interpret the results of injury assessment and determine an appropriate therapeutic modality program to return the patient to physical activity.
 - d. Determine the appropriate therapeutic modality program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.
 - e. Determine the criteria for progression and return to activity based on the level of functional outcomes.
 - f. Describe appropriate methods of assessing progress when using therapeutic modalities and interpret the results.
 - g. Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a treatment plan.
 - h. Describe appropriate medical documentation for recording progress in a therapeutic modality program.
- 10. Identify manufacturer's, institutional, state, and federal standards for the operation and safe application of therapeutic modalities.
- 11. Identify manufacturer's, institutional, state and federal guidelines for the inspection and maintenance of therapeutic modalities.

- 1. Assess patient to identify indications, contraindications, and precautions applicable to the application of therapeutic modalities.
- 2. Obtain and interpret baseline and posttreatment objective physical measurements to evaluate and interpret results.
- 3. Inspect the therapeutic modalities and treatment environment for potential safety hazards.

- 4. Position and prepare the patient for the application of therapeutic modalities.
- 5. Select and apply appropriate therapeutic modalities according to evidence-based guidelines.
- 6. Document treatment goals, expectations, and treatment outcomes.

Clinical Proficiency

Synthesize information obtained in a patient interview and physical examination to determine the indications, contraindications and precautions for the selection, patient set-up, and evidence-based application of therapeutic modalities for acute and chronic injuries. The student will formulate a progressive treatment and rehabilitation plan and appropriately apply the modalities. Effective lines of communication should be established to elicit and convey information about the patient's status and the prescribed modality(s). While maintaining patient confidentiality, all aspects of the treatment plan should be documented using standardized record-keeping methods.

Conditioning and Rehabilitative Exercise (EX)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must plan, implement, document, and evaluate the efficacy of therapeutic exercise programs for the rehabilitation and reconditioning of injuries and illnesses.

The cognitive and psychomotor competencies and clinical proficiencies should encompass multiple methods and techniques of therapeutic exercise, performed via a variety of mediums (e.g. aquatic therapy, etc.), in the following categories:

- a. Exercises and techniques to improve joint range of motion
- b. Exercises to improve muscular strength
- c. Exercises to improve muscular endurance
- d. Exercises to improve muscular speed
- e. Exercises to improve muscular power
- f. Exercises to improve balance, neuromuscular control, and coordination
- g. Exercises to improve agility
- h. Exercises to improve cardiorespiratory endurance
- i. Exercises to improve activity-specific skills including ergonomics and work hardening

The use of learning objectives and outcomes in therapeutic exercise ensures that the student is able to:

- 1. Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the development, progression and implementation of a therapeutic exercise program.
- 2. Describe the mechanical principles applied to the design and use of therapeutic exercise equipment and techniques (leverage, force, kinesiology and biomechanics).
- 3. Describe common surgical techniques, pathology, and any subsequent anatomical alterations that may affect the implementation of a therapeutic exercise program.
- 4. Describe the appropriate selection and application of therapeutic exercises taking the following into consideration:
 - a. The physiological responses of the human body to trauma

- b. The physiological effects of inactivity and immobilization on the musculoskeletal, cardiovascular, nervous, and respiratory systems of the human body
- c. The anatomical and/or biomechanical alterations resulting from acute and chronic injury and improper mechanics
- d. The physiological adaptations induced by the various forms of therapeutic exercise, such as fast- versus slow-twitch muscle fibers
- e. The physiological responses of additional factors, such as age and disease
- 5. Describe the indications, contraindications, theory, and principles for the incorporation and application of various contemporary therapeutic exercise equipment and techniques, including aquatic therapy, manual therapy and mobilization.
- 6. Define the basic components of activity-specific rehabilitation goals, functional progressions, and functional outcomes in a therapeutic exercise program.
- 7. Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies in order to determine appropriate treatment and rehabilitation plans and to evaluate the readiness to return to the appropriate level of activity. This includes the ability to:
 - a. Describe and interpret appropriate measurement and functional testing procedures as they relate to the selection and application of therapeutic exercise.
 - b. Interpret objective measurement results (muscular strength/endurance, range of motion) as a basis for developing an individualized therapeutic exercise program.
 - c. Interpret the results of a physical assessment and determine an appropriate therapeutic exercise program to return the patient to physical activity.
 - d. Determine the appropriate therapeutic exercise program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.
 - e. Determine the criteria for progression and return to activity based on the level of functional outcomes.
 - f. Describe appropriate methods of assessing progress in a therapeutic exercise program and interpret the results.
 - g. Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a therapeutic exercise program.
 - h. Describe appropriate medical documentation for recording progress in a therapeutic exercise program.
- 8. Explain the effectiveness of taping, wrapping, bracing, and other supportive/protective methods for facilitation of safe progression to advanced therapeutic exercises and functional activities.

- 1. Assess a patient to determine specific therapeutic exercise indications, contraindications, and precautions.
- 2. Obtain and interpret baseline and postexercise objective physical measurements to evaluate therapeutic exercise progression and interpret results.
- 3. Inspect therapeutic exercise equipment to ensure safe operating condition.
- 4. Demonstrate the appropriate application of contemporary therapeutic exercises and techniques according to evidence-based guidelines.
- 5. Instruct the patient in proper techniques of commonly prescribed therapeutic exercises.
- 6. Document rehabilitation goals, progression and functional outcomes.
- 7. Perform a functional assessment for safe return to physical activity.

Clinical Proficiency

Synthesize information obtained in a patient interview and physical examination to determine the indications, contraindications and precautions for the selection, application, and evidence-based design of a therapeutic exercise program for injuries to the upper extremity, lower extremity, trunk, and spine. The student will formulate a progressive rehabilitation plan and appropriately demonstrate and/or instruct the exercises and/or techniques to the patient. Effective lines of communication should be established to elicit and convey information about the patient's status and the prescribed exercise(s). While maintaining patient confidentiality, all aspects of the exercise plan should be documented using standardized record-keeping methods.

Pharmacology (PH)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess an understanding of pharmacologic applications and governing pharmacy regulations relevant to the treatment of injuries, illnesses, and diseases. The use of learning objectives and outcomes in pharmacology ensures that the student is able to:

- 1. Explain the laws, regulations, and procedures that govern storing, transporting, dispensing, and recording prescription and nonprescription medications (Controlled Substance Act, scheduled drug classification, and state statutes).
- 2. Identify appropriate pharmaceutical terminology and abbreviations used in the prescription, administration, and dispensing of medications.
- 3. Identify information about the indications, contraindications, precautions, and adverse reactions for common prescription and nonprescription medications (including herbal medications) using current pharmacy resources.
- 4. Explain the concepts of pharmacokinetics (absorption, distribution, metabolism, and elimination) and the suspected influence that exercise might have on these processes.
- 5. Explain the concepts related to bioavailability, half-life, and bioequivalence.
- 6. Explain the general pharmacodynamic principles as they relate to the mechanism of drug action and therapeutic effectiveness (e.g. receptor theory, dose-response relationship, potency, and drug interactions).
- 7. Describe the common routes used to administer medications (e.g., oral, inhalation, and injection) and their advantages and disadvantages.
- 8. Explain the relationship between generic or brand name pharmaceuticals.
- 9. Identify medications that might cause possible poisoning, and describe how to activate and follow the locally established poison control protocols.

- 10. Explain the known usage patterns, general effects, and short- and long-term adverse effects for the commonly used performance-enhancing substances.
- 11. Identify which therapeutic drugs and nontherapeutic substances are banned by sport and/or workplace organizations in order to properly advise patients about possible disqualification and other consequences.

- 1. Obtain and communicate patient education materials regarding physicianprescribed medications, over-the-counter drugs, and performance-enhancing substances using appropriate references.
- 2. Abide by federal, state, and local regulations for the proper storage, transportation, dispensing (administering where appropriate), and documentation of commonly used medications.
- 3. Activate and effectively follow locally established poison control protocols.

Psychosocial Intervention and Referral (PS)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level athletic trainer must possess the ability to recognize, intervene, and refer when appropriate patients exhibiting sociocultural, mental, emotional, and psychological behavioral problems/issues. The use of learning objectives and outcomes in psychosocial intervention and referral ensures that the student is able to:

- 1. Explain the psychosocial requirements (i.e., motivation and self-confidence) of various activities that relate to the readiness of the injured or ill individual to resume participation.
- 2. Explain the stress-response model and the psychological and emotional responses to trauma and forced inactivity.
- 3. Describe the motivational techniques that the athletic trainer must use during injury rehabilitation and reconditioning.
- 4. Describe the basic principles of mental preparation, relaxation, visualization, and desensitization techniques.
- 5. Describe the basic principles of general personality traits, associated trait anxiety, locus of control, and patient and social environment interactions.
- 6. Explain the importance of providing health care information to patients, parents/guardians, and others regarding the psychological and emotional well being of the patient.
- 7. Describe the roles and function of various community-based health care providers (to include, but not limited, to: psychologists, counselors, social workers, human resources personnel) and the accepted protocols that govern the referral of patients to these professionals.
- 8. Describe the theories and techniques of interpersonal and cross-cultural communication among athletic trainers, their patients, and others involved in the health care of the patient.
- 9. Explain the basic principles of counseling (discussion, active listening, and resolution) and the various strategies that certified athletic trainers may employ to avoid and resolve conflicts among superiors, peers, and subordinates.

- 10. Identify the symptoms and clinical signs of common eating disorders and the psychological and sociocultural factors associated with these disorders.
- 11. Identify and describe the sociological, biological and psychological influences toward substance abuse, addictive personality traits, the commonly abused substances, the signs and symptoms associated with the abuse of these substances, and their impact on an individual's health and physical performance
- 12. Describe the basic signs and symptoms of mental disorders (psychoses), emotional disorders (neuroses, depression), or personal/social conflict (family problems, academic or emotional stress, personal assault or abuse, sexual assault, sexual harassment), the contemporary personal, school, and community health service agencies, such as community-based psychological and social support services that treat these conditions and the appropriate referral procedures for accessing these health service agencies.
- 13. Describe the acceptance and grieving processes that follow a catastrophic event and the need for a psychological intervention and referral plan for all parties affected by the event.
- 14. Explain the potential need for psychosocial intervention and referral when dealing with populations requiring special consideration (to include but not limited to those with exercise-induced asthma, diabetes, seizure disorders, drug allergies and interactions, unilateral organs, physical and/or mental disability).
- 15. Describe the psychosocial factors that affect persistent pain perception (i.e., emotional state, locus of control, psychodynamic issues, sociocultural factors, and personal values and beliefs) and identify multidisciplinary approaches for managing patients with persistent pain.

Clinical Proficiency #1

Demonstrate the ability to conduct an intervention and make the appropriate referral of an individual with a suspected substance abuse or other mental health problem. Effective lines of communication should be established to elicit and convey information about the patient's status. While maintaining patient confidentiality, all aspects of the intervention and referral should be documented using standardized record-keeping methods.

Clinical Proficiency #2

Demonstrate the ability to select and integrate appropriate motivational techniques into a patient's treatment or rehabilitation program. This includes, but is not limited to, verbal motivation, visualization, imagery, and/or desensitization. Effective lines of communication should be established to elicit and convey information about the techniques. While maintaining patient confidentiality, all aspects of the program should be documented using standardized record-keeping techniques.

Nutritional Aspects of Injuries and Illnesses (NU)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess an understanding of the nutritional aspects of injuries and illnesses. The use of learning objectives and outcomes in the nutritional aspects of injuries and illnesses ensures that the student is able to:

- 1. Describe personal health habits and their role in enhancing performance, preventing injury or illness, and maintaining a healthy lifestyle.
- 2. Describe the USDA's "My Pyramid" and explain how this can be used in performing a basic dietary analysis and creating a dietary plan for a patient.
- 3. Identify and describe primary national organizations responsible for public and professional nutritional information.
- 4. Identify nutritional considerations in rehabilitation, including nutrients involved in healing and nutritional risk factors (e.g., reduced activity with the same dietary regimen and others).
- 5. Describe common illnesses and injuries that are attributed to poor nutrition (e.g., effects of poor dietary habits on bone loss, on injury, on long-term health, and on other factors).
- 6. Explain energy and nutritional demands of specific activities and the nutritional demands placed on the patient.
- 7. Explain principles of nutrition as they relate to the dietary and nutritional needs of the patient (e.g., role of fluids, electrolytes, vitamins, minerals, carbohydrates, protein, fat, and others).
- 8. Explain the physiological processes and time factors involved in the digestion, absorption, and assimilation of food, fluids, and nutritional supplements. Further, relate these processes and time factors to the design and planning of preactivity and postactivity meals, menu content, scheduling, and the effect of other nonexercise stresses before activity.
- 9. Describe the principles, advantages, and disadvantages of ergogenic aids and dietary supplements used in an effort to improve physical performance.

- 10. Explain implications of FDA regulation of nutritional products.
- 11. Identify and interpret pertinent scientific nutritional comments or position papers (e.g., healthy weight loss, fluid replacement, pre-event meals, and others).
- 12. Explain principles of weight control for safe weight loss and weight gain, and explain common misconceptions regarding the use of food, fluids, and nutritional supplements in weight control.
- 13. Explain consequences of improper fluid replacement.
- 14. Describe disordered eating and eating disorders (i.e., signs, symptoms, physical and psychological consequences, referral systems).
- 15. Identify effects of macronutrients (e.g., saturated fats, incomplete proteins, and complex carbohydrates) on performance, health, and disease.
- 16. Describe signs, symptoms, and physiological effects of mineral deficiency (e.g., iron, and calcium), and identify foods high in specific mineral content.
- 17. Identify and explain food label Daily Value recommendations and common food sources of essential vitamins and minerals in using current USDA Dietary Guidelines.
- 18. Describe the principles and methods of body composition assessment (e.g., skinfold calipers, bioelectric impedance, body mass index [BMI]) to assess a patient's health status and to monitor progress in a weight loss or weight gain program for patients of all ages and in a variety of settings.
- 19. Explain the relationship between basal metabolic rate, caloric intake, and energy expenditure in the use of the Food Pyramid Guidelines.
- 20. Identify the nutritional benefits and costs of popular dietary regimen for weight gain, weight loss, and performance enhancement.

- 1. Assess body composition by validated technique (e.g., skinfold calipers, bioelectric impedance, BMI, etc.) to assess a patient's health status and to monitor progress during a weight loss or weight gain program.
- 2. Calculate energy expenditure, caloric intake, and BMR.
- 3. Provide educational information about basic nutritional concepts, facts, needs, and food labels for settings associated with physically active individuals of a wide range of ages and needs.

Clinical Proficiency #1

Demonstrate the ability to counsel a patient in proper nutrition. This may include providing basic nutritional information and/or an exercise and nutrition program for weight gain or weight loss. The student will demonstrate the ability to take measurements and figure calculations for a weight control plan (e.g., measurement of body composition and BMI, calculation of energy expenditure, caloric intake, and BMR). Armed with basic nutritional data, the student will demonstrate the ability to develop and implement a preparticipation meal and an appropriate exercise and nutritional plan for an active individual. The student will develop an active listening relationship to effectively communicate with the patient and, as appropriate, refer the patient to other medical professionals (physician, nutritionist, counselor or psychologist) as needed.

Clinical Proficiency #2

Demonstrate the ability to recognize disordered eating and eating disorders, establish a professional helping relationship with the patient, interact through support and education, and encourage vocal discussion and other support through referral to the appropriate medical professionals.

Health Care Administration (AD)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess the knowledge and skills to develop, administer, and manage a health care facility and associated venues that provide health care to athletes and others involved in physical activity. The use of learning objectives and outcomes in health care administration ensures that the student is able to:

- 1. Describe organization and administration of preparticipation physical examinations and screening including, but not limited to, developing assessment and record-keeping forms that include the minimum recommendations from recognized health and medical organizations, scheduling of appropriate health and medical personnel, and efficient site use.
- 2. Identify components of a medical record (e.g., emergency information, treatment documentation, epidemiology, release of medical information, etc.), common medical record-keeping techniques and strategies, and strengths and weaknesses of each approach and the associated implications of privacy statutes (Health Insurance Portability and Accountability Act [HIPAA] and Federal Educational Rights Privacy Act [FERPA]).
- 3. Identify current injury/illness surveillance and reporting systems.
- 4. Identify common human resource policy and federal legislation regarding employment (e.g., The Americans with Disabilities Act, Family Medical Leave Act, FERPA, Fair Labor Standards Act, Affirmative Action, Equal Employment Opportunity Commission).
- 5. Describe duties of personnel management, including (1) recruitment and selection of employees, (2) retention of employees. (3) development of policies-and-procedures manual, (4) employment performance evaluation. 5) compliance with nondiscriminatory and unbiased employment practices.
- 6. Identify principles of recruiting, selecting, and employing physicians and other medical and allied health care personnel in the deployment of health care services.
- 7. Describe federal and state infection control regulations and guidelines, including universal precautions as mandated by the Occupational Safety and Health Administration (OSHA), for the prevention, exposure, and control of infectious diseases and discuss how they apply to the athletic trainer.

- 8. Identify key accrediting agencies for health care facilities (e.g., Joint Commission on Accreditation of Healthcare Organizations [JCAHO], Commission on Accreditation of Rehabilitation Facilities [CARF] and allied health education programs (e.g., Commission on Accreditation of Athletic Training Education [CAATE]) and describe their function in the preparation of health care professionals and the overall delivery of health care.
- 9. Identify and describe technological needs of an effective athletic training service and the commercial software and hardware that are available to meet these needs.
- 10. Describe the various types of health insurance models (e.g., health maintenance organization [HMO], preferred provider organization [PPO], fee-for-service, cash, and Medicare) and the common benefits and exclusions identified within these models.
- 11. Describe the concepts and procedures for third-party insurance reimbursement including the use of diagnostic (ICD-9-CM) and procedural (CPT) coding.
- 12. Explain components of the budgeting process, including purchasing, requisition, bidding, and inventory.
- 13. Describe basic architectural considerations that relate to the design of safe and efficient clinical practice settings and environments.
- 14. Describe vision and mission statements to focus service or program aspirations and strategic planning (e.g., "weaknesses, opportunities, threats and strengths underlying planning" [WOTS UP], "strengths, weaknesses, opportunities and threats" [SWOT]) to critically bring out organizational improvement.
- 15. Explain typical administrative policies and procedures that govern first aid and emergency care (e.g., informed consent and incident reports).
- 16. Identify and describe basic components of a comprehensive emergency plan for the care of acutely injured or ill patients, which include (1) emergency action plans for each setting or venue; (2) personnel education and rehearsal; (2) emergency care supplies and equipment appropriate for each venue; (3) availability of emergency care facilities; (4) communication with onsite personnel and notification of EMS; (5) the availability, capabilities, and policies of community-based emergency care facilities and community-based managed care systems; (6) transportation; (7) location of exit and evacuation routes; (8) activity or event coverage; and (9) record keeping.
- 17. Explain basic legal concepts as they apply to a medical or allied health care practitioner's responsibilities (e.g., standard of care, scope of practice, liability, negligence, informed consent and confidentiality, and others).

- 18. Identify components of a comprehensive risk management plan that addresses the issues of security, fire, electrical and equipment safety, emergency preparedness, and hazardous chemicals.
- 19. Describe strategic processes and effective methods for promoting the profession of athletic training and those services that athletic trainers perform in a variety of practice settings (e.g., high schools and colleges, professional and industrial settings, hospitals and community-based health care facilities, etc.).
- 20. Differentiate the roles and responsibilities of the athletic trainer from those of other medical and allied health personnel who provide care to patients involved in physical activity and describe the necessary communication skills for effectively interacting with these professionals.
- 21. Describe role and functions of various community-based medical, paramedical, and other health care providers and protocols that govern the referral of patients to these professionals.
- 22. Describe basic components of organizing and coordinating a drug testing and screening program, and identify the sources of current banned-drug lists published by various associations.

- 1. Develop risk management plans, including facility design, for safe and efficient health care facilities.
- 2. Develop a risk management plan that addresses issues of liability reduction; security, fire, and facility hazards; electrical and equipment safety; and emergency preparedness.
- 3. Develop policy and write procedures to guide the intended operation of athletic training services within a health care facility.
- 4. Demonstrate the ability to access medical and health care information through electronic media.
- 5. Use appropriate terminology and medical documentation to record injuries and illnesses (e.g., history and examination findings, progress notes, and others).
- 6. Use appropriate terminology to effectively communicate both verbally and in writing with patients, physicians, colleagues, administrators, and parents or family members.
- 7. Use a comprehensive patient-file management system that incorporates both paper and electronic media for purposes of insurance records, billing, and risk management.

8. Develop operational and capital budgets based on a supply inventory and needs assessment.

Professional Development and Responsibility (PD)

In order to demonstrate knowledge of the practice of athletic training, to think critically about the practices involved in athletic training, including the ability to integrate knowledge, skill and behavior, and to assume professional responsibility, the entry-level certified athletic trainer must possess the knowledge and skills to understand professional responsibilities and avenues of professional development to promote athletic training as a professional discipline. The use of learning objectives and outcomes to support the development of knowledge and skills in professional development and responsibility ensures that the student is able to:

- 1. Explain the role and function of state athletic training practice acts and registration, licensure, and certification agencies including (1) basic legislative processes for the implementation of practice acts, (2) rationale for state regulations that govern the practice of athletic training, and (3) consequences of violating federal and state regulatory acts.
- 2. Describe the process of attaining and maintaining national and state athletic training professional credentials.
- 3. Describe the current professional development requirements for the continuing education of athletic trainers and how to locate available, approved continuing education opportunities.
- 4. Describe the role and function of the governing structures of the National Athletic Trainers' Association.
- 5. Differentiate the essential documents of the national governing, certifying, and accrediting bodies, including, but not limited to, the Athletic Training Educational Competencies, Standards of Practice, Code of Ethics, Role Delineation Study, and the Standards for the Accreditation of Entry-Level Athletic Training Education Programs.
- 6. Summarize the position statements regarding the practice of athletic training.
- 7. Describe the role and function of the professional organizations and credentialing agencies that impact the athletic training profession.
- 8. Summarize the current requirements for the professional preparation of the athletic trainer.

- 9. Identify the objectives, scope of practice and professional activities of other health and medical organizations and professions and the roles and responsibilities of these professionals in providing services to patients.
- 10. Identify the issues and concerns regarding the health care of patients (e.g., public relations, third-party payment, and managed care).
- 11. Identify and access available educational materials and programs in health-related subject matter areas (audiovisual aids, pamphlets, newsletters, computers, software, workshops, and seminars).
- 12. Summarize the principles of planning and organizing workshops, seminars, and clinics in athletic training and sports medicine for health care personnel, administrators, other appropriate personnel, and the general public.
- 13. Describe and differentiate the types of quantitative and qualitative research and describe the components and process of scientific research (including statistical decision-making) as it relates to athletic training research.
- 14. Interpret the current research in athletic training and other related medical and health areas and apply the results to the daily practice of athletic training.
- 15. Identify the components of, and the techniques for constructing, a professional resume.
- 16. Summarize the history and development of the athletic training profession.
- 17. Describe the theories and techniques of interpersonal and cross-cultural communication among athletic trainers, patients, administrators, health care professionals, parents/guardians, and other appropriate personnel.

- 1. Collect and disseminate injury prevention and health care information to health care professionals, patients, parents/guardians, other appropriate personnel and the general public (e.g., team meetings, parents' nights, parent/teacher organization [PTO] meetings, booster club meetings, workshops, and seminars).
- 2. Access by various methods the public information policy-making and governing bodies used in the guidance and regulation of the profession of athletic training (including but not limited to state regulatory boards, NATA, BOC).
- 3. Develop and present material (oral, pamphlet/handout, written article, or other media type) for an athletic training-related topic.
- 4. Develop a research project (to include but not limited to case study, clinical research project, literature review) for an athletic training-related topic.

Comparison of 3rd and 4th Editions

The specific changes between the 3rd and 4th editions of the competencies are illustrated in Tables 1 and 2. This analysis is intended to facilitate transition to the 4th edition of the competencies. The tables contain the same content. They differ only in the way the content is organized. In both tables, 3rd edition competencies are listed in column 1 and 4th edition competencies are list in column 3. In column 2 is a brief explanation of the action taken to derive the 4th edition competencies, i.e., what changes were made to the 3rd edition competencies. Table 1 is sorted by the 3rd edition competencies while Table 2 is sorted by the 4th edition competencies. Thus if you want to see what happened to 3rd edition competencies, look in Table 1 and find the specific competency in the first column. Then look to the 3rd column to see the corresponding competency in the 4th edition. On the other hand, if you are interested in the origin of a 4th edition competency, look in column 3 of Table 2, then look to column 1 to find the corresponding 3rd edition competency.

Following are the 12 content areas, with their abbreviations, of the 4th edition listed in the order they appear in the book. Names of nine of the areas are unchanged. For the three areas whose names changed, the 3rd edition name is in parentheses following the new name.

- 1. RM Risk Management and Injury Prevention (pg. 7)
- 2. PA Pathology of Injuries and Illnesses (pg. 11)
- 3. DI Orthopedic Clinical Evaluation and Diagnosis (Assessment and Evaluation) (pg. 13)
- 4. MC Medical Conditions and Diseases (General Medical Conditions and Diseases) (pg. 17)
- 5. AC Acute Care of Injury and Illness (pg. 21)
- 6. TM Therapeutic Modalities (pg. 25)
- 7. EX Conditioning and Rehabilitative Exercise (Therapeutic Exercise) (pg. 29)
- 8. PH Pharmacology (pg. 33)
- 9. PS Psychosocial Intervention and Referral (pg. 35)
- 10. NU Nutritional Aspects of Injuries and Illnesses (pg. 37)
- 11. AD Health Care Administration (pg. 41)
- 12. PD Professional Development and Responsibility (pg. 45)

Table 1 Sorted by 3rd Edition (pg. 48) Table 2 Sorted by 4th Edition (pg. 56)

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4₩ Ed.
	Risk Management & Injury Preven	ntion	RM-CP2.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C1	reworded	RM-C1	RM-CP3.1	reworded	RM-CP3
RM-C2	reworded	RM-C2	RM-CP4.1	combined CP4.1, 8.1-9.1	RM-CP2
RM-C3	reworded	RM-C4	RM-CP5.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C4	reworded	RM-C5	RM-CP5.2	combined CP2.1, 5.1-7.2	RM-CP1
RM-C5	reworded and added "AED"	RM-C7	RM-CP5.3	combined CP2.1, 5.1-7.2	RM-CP1
RM-C6	reworded	RM-C8	RM-CP5.4	combined CP2.1, 5.1-7.2	RM-CP1
RM-C7	reworded	RM-C9	RM-CP5.5	combined CP2.1, 5.1-7.2	RM-CP1
RM-C8	reworded	RM-C10	RM-CP6.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C9	reworded	RM-C11	RM-CP7.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C10	combined C10, 12-14	RM-C13	RM-CP7.2	combined CP2.1, 5.1-7.2	RM-CP1
RM-C11	reworded	RM-C12	RM-CP8.1	combined CP4.1, 8.1-9.1	RM-CP2
RM-C12	combined C10, 12-14	RM-C13	RM-CP9.1	combined CP4.1, 8.1-9.1	RM-CP2
RM-C13	combined C10, 12-14	RM-C13			
RM-C14	combined C10, 12-14	RM-C13		Pathology of Injuries & Illnesses	
RM-C15	combined C15, 16	RM-C14	PA-C1	reworded	PA-C1
RM-C16	combined C15, 16	RM-C14	PA-C2	eliminated	
RM-C17	reworded	RM-C15	PA-C3	combined C3, 9p-10p, 14p	PA-C2
RM-C18	combined C18-20	RM-C16	PA-C4	eliminated	
RM-C19	combined C18-20	RM-C16	PA-C5	reworded	PA-C3
RM-C20	combined C18-20	RM-C16	PA-C6	combined C6, 8, 9p, 10p, 11, 13,	PA-C4
RM-C21	combined C21, 22	RM-C17		14p, 15, 17	
RM-C22	combined C21, 22	RM-C17	PA-C7	combined PA-C7, DI-C20	PA-C6
RM-C23	combined C23, 24	RM-C18	PA-C8	combined C6, 8, 9p, 10p, 11, 13,	PA-C4
RM-C24	combined C23, 24	RM-C18	PA-C9p	14p, 15, 17	D4 00
RM-C25	reworded	RM-C19	1 A-03p	combined C6, 8, 9p, 10p, 11, 13, 14p, 15, 17	PA-C2
	newh	RM-C20	PA-C9p	combined C3, 9p,10p, 14p	PA-C4
	new	RM-C3	PA-C10p	combined C6, 8, 9p, 10p, 11, 13,	PA-C2
	new	RM-C6	BA C10m	14p, 15, 17	
RM-P1	combined D4 0 C 7	D11 D1	PA-C10p	combined C3, 9p, 10p, 14p	PA-C4
RM-P2	combined P1-3, 6, 7 combined P1-3, 6, 7	RM-P1 RM-P1	PA-C11	combined C6, 8, 9p, 10p, 11, 13, 14p, 15, 17	PA-C4
RM-P3	combined P1-3, 6, 7	RM-P1	PA-C12	reworded	PA-C5
RM-P4	combined P4, 5	RM-P6	PA-C13	combined MC-C31-33, PA-C13	MC-C16
RM-P5	combined P4, 5	RM-P6	PA-C14p	combined C6, 8, 9p, 10p, 11, 13,	PA-C2
RM-P6	combined P1-3, 6, 7	RM-P1	DA 044:	14p, 15, 17	
RM-P7	combined P1-3, 6, 7	RM-P1	PA-C14p	combined C3, 9p,10p, 14p	PA-C4
RM-P8	reworded	RM-P5	PA-C15	combined C6, 8, 9p, 10p, 11, 13, 14p, 15, 17	PA-C4
RM-P9	reworded	RM-P4	PA-C16	in RM	RM-C15
RM-P10	reworded	RM-P3	PA-C17	combined C6, 8, 9p, 10p, 11, 13,	PA-C4
RM-P11	reworded	RM-P2		14p, 15, 17	1-A-04
RM-P12	reworded	RM-P4	PA-C18	reworded	PA-C5
	new	RM-P6p	PA-C19p	combined EX-C1, PA-C19p	EX-C1
		1	PA-C19p	combined TM-C1, PA-C19p	TM-C1
RM-CP1.1	eliminated		PA-C19p	combined C1, 9, PA-C19p	TM-C8

3rd Ed.	Action	4⊕ Ed.	3₁₀ Ed.	Action	4₁₁ Ed.
Ortho	opedic Assessment (Injury Evaluat	ion)	DI-P8	reworded	DI-P7
DI-C1	reworded	DI-C1	DI-P9	reworded	DI-P8
DI-C2	reworded	DI-C2	DI-P10	combined DI-C24, 25; DI-P10, 11	MC-P4
DI-C3	reworded	DI-C3		MC-P1p, 3p, 4p, 9p, 11, 13-15	
DI-C4	reworded	DI-C4	01.044	AC-C5p	
DI-C5	reworded	DI-C5	DI-P11	combined DI-C24, 25; DI-P10, 11 MC-P1p, 3p, 4p, 9p, 11, 13-15.	MC-P4
DI-C6	eliminated			AC-C5p	
DI-C7	combined C7, 9	DI-C6	DI-P12	combined DI-P12, 13p	DI-P4
DI-C8	unchanged	DI-C7	DI-P13p	combined DI-P12, 13p	DI-P4
DI-C9	combined C7, 9	DI-C6	DI-P13p	combined P1p, 3p, 4p, 12, DI-	MC-P3
DI-C10	combined C10-12	DI-C8		P13p	
DI-C11	combined C10-12	DI-C8	DI-P14	combined DI-P14, AC-C5p	DI-P9
DI-C12	combined C10-12	DI-C8	DI-P15	eliminated	
DI-C13	reworded	DI-C12	DI-P16		MC-C17
DI-C14	reworded	DI-C10	DI-P17	reworded	DI-P10
DI-C15	reworded	DI-C12			
DI-C16	reworded	DI-C13	DI-CP1.1	combined CP1.1-6	DI-CP1
DI-C17	eliminated		DI-CP1.2	combined CP1.1-6	DI-CP1
DI-C18	eliminated		DI-CP1.3	combined CP1.1-6	DI-CP1
DI-C19	reworded	DI-C14	DI-CP2.1	combined CP1.1-6	DI-CP1
DI-C20	combined PA-C7, DI-C20	PA-C6	DI-CP3.1	combined CP1.1-6	DI-CP1
DI-C21	reworded	DI-C15	DI-CP4.1	combined CP1.1-6	DI-CP1
DI-C22p	combined MC-C17p; DI-C17p, C22p	MC-C12	DI-CP5.1 DI-CP6	combined CP1.1-6 combined CP1.1-6	DI-CP1 DI-CP1
DI-C22p	combined MC-C20-25; DI-C22p	MC-C14			
DI-C23	combined MC-C17p; DI-C17p, C22p	MC-C12	Medical Conditions & Disabilities (General Medical Conditions & Disabilities)		
DI-C24	combined DI-C24, 25; DI-P10, 11;	MC-P4	MC-C1	reworded	MC-C1
	MC-P1p, 3p. 4p, 9p. 11, 13-15,		MC-C2p	reworded	MC-C2
	AC-C5p		MC-C2p	in RiskMngt	RM-C2
DI-C25	combined DI-C24, 25; DI-P10, 11;	MC-P4	MC-C3	in RiskMngt	RM-C6
	MC-P1p. 3p. 4p, 9p, 11. 13-15. AC-C5p		MC-C4	reworded	MC-C4
DI-C26	reworded	DI-C16	MC-C5	reworded	MC-C5
DI-C27	combined DI-C27, AD-C14p	DI-C17	MC-C6	reworded	MC-C6
	new	DI-C11	MC-C7	combined C7 10 34p	MC-C7
			MC-C8	reworded	MC-C8
DI-P1	reworded	DI-P1	MC-C9	unchanged	MC-C9
DI-P2	reworded	DI-P2	MC-C10	combined C7 10, 34p	MC-07
DI-P3p	reworded and added	DI-P5	MC-C11	reworded	MC-C10
,	anclinometer.		MC-C12	eliminated	0 0 3
DI-P3p	combined DI-P3, 5	DI-P6	MC-C13	eliminated	
DI-P4	reworded and added inclinometer	DI-P5	MC-C14	combined C14 15 19 30	MC-C11
DI-P5	combined DI-P3 5	DI-P6	MC-C15	combined C14 15 19 30	MC-C11
DI-P6	reworded	DI-P3	MC-C16	in Pathology	PA-C4
DI-P7	reworded	DI-P7	MC-C17p	combined MC-C17p, DI-C17p C22p	MC-C12

3rd Ed.	Action	4н Ed.	3rd Ed.	Action	4 _{th} Ed.
MC-C17p	combined MC-C17p, 18	MC-C13	MC-P3p	combined DI-C24, 25; DI-P10, 11	, MC-P4
MC-C18	combined MC-C17p, 18	MC-C13		MC-P1p, 3p, 4p, 9p, 11, 13-15,	
MC-C19	combined C14, 15, 19, 30	MC-C11	MC D4=	AC-C5p	
MC-C20	combined MC-C20-25; DI-C22p	MC-C14	MC-P4p	combined P1p, 3p, 4p	MC-P1
MC-C21	combined MC-C20-25; DI-C22p	MC-C14	MC-P4p	combined P1p, 3p, 4p	MC-P2
MC-C22	combined MC-C20-25; DI-C22p	MC-C14	MC-P4p	combined P1p, 3p, 4p, 12, DI- P13p	MC-P3
MC-C23	combined MC-C20-25; DI-C22p	MC-C14	MC-P4p	combined DI-C24, 25; DI-P10, 11;	MC-P4
MC-C24	combined MC-C20-25; DI-C22p	MC-C14		MC-P1p, 3p, 4p, 9p, 11, 13-15,	1010-1-4
MC-C25	combined MC-C20-25; DI-C22p	MC-C14		AC-C5p	
MC-C26	combined C26, 29, 34p-36	MC-C16	MC-P5	in Acute Care	AC-C27
MC-C27	combined MC-C27, 28, 34p, P6	MC-C15	MC-P6	combined MC-C27, 28, 34p, P6	MC-C15
MC-C28	combined MC-C27, 28, 34p, P6	MC-C15	MC-P7	in Acute Care	AC-C27
MC-C29	combined C26, 29, 34p-36	MC-C16	MC-P8p	combined MC-C31-33, P8p; DI-	MC-C17
MC-C30	combined C14, 15, 19, 30	MC-C11	110 B0	P16	
MC-C31	combined MC-C31-33, P8p; DI-	MC-C17	MC-P8p	reworded	MC-C19
MC-C32	P16 combined MC-C31-33, P8p; DI-	MC-C17	MC-P9	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-C5p	MC-P4
MC-C33	P16 combined MC-C31-33, P8p; DI- P16	MC-C17	MC-P10	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-C5p	MC-P4
MC-C34p	combined MC-C27, 28, 34p, P6	MC-C15	MC-P11	,	MC D4
MC-C34p	combined C26, 29, 34p-36	MC-C16	IVIO-I I I	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15,	MC-P4
MC-C34p	combined C7, 10, 34p	MC-C7		AC-C5p	
MC-C35	combined C26, 29, 34p-36	MC-C16	MC-P12	combined P1p, 3p, 4p, 12, DI-	MC-P3
MC-C36	combined C26, 29, 34p-36	MC-C16	140 540	P13p	
MC-C37	reworded	MC-C19	MC-P13	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15,	MC-P4
	new	MC-C18	•	AC-C5p	
	new	MC-C18	MC-P14	combined DI-C24, 25; DI-P10, 11;	MC-P4
	new	MC-C20		MC-P1p, 3p, 4p, 9p, 11, 13-15,	
	new	MC-C22	NO D45	AC-C5p	
	new	MC-C3	MC-P15	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-C5p	MC-P4
MC-P1p	combined P1p, 3p, 4p	MC-P1	MC-P16	combined AC-C16, MC-P16	AC-C14
MC-P1p	combined P1p, 3p, 4p	MC-P2	MC-P17	eliminated	
MC-P1p	combined P1p, 3p, 4p, 12, DI- P13p	MC-P3	MC-CP1.1	combined CD1 1 1 0 AD C14-	140,004
MC-P1p	combined DI-C24, 25; DI-P10, 11;	MC-P4	MC-CP1.1	combined CP1.1-1.9, AD-C14p	MC-CP1
	MC-P1p, 3p, 4p, 9p, 11, 13-15,			combined CP1.1-1.9, AD-C14p	MC-CP1
	AC-C5p		MC-CP1.3	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P2	combined P4, 8, 9, 12, 15-21; MC-	AC-P4	MC-CP1.4	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P3p	P2; PH-P6. 7; PH-CP3.2	MC D4	MC-CP1.5	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P3p	combined P1p, 3p, 4p combined P1p, 3p, 4p	MC-P1	MC-CP1.6	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P3p	· · · ·	MC-P2	MC-CP1.7	combined CP1.1-1.9, AD-C14p	MC-CP1
WC-FOD	combined P1p, 3p, 4p, 12, DI- P13p	MC-P3	MC-CP1.8	combined CP1.1-1.9, AD-C14p	MC-CP1
	· · · - 		MC-CP1.9	combined CP1.1-1.9, AD-C14p	MC-CP1

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4th Ed.
	Acute Care		AC-C43	reworded	AC-C31
AC-C1	unchanged	AC-C1	AC-C44	reworded	AC-C32
AC-C2	unchanged	AC-C2	AC-C45	reworded	AC-C32
AC-C3	reworded	AC-C3	AC-C46	reworded	AC-C33
AC-C4	unchanged	AC-C4			
AC-C5p	combined DI-P14, AC-C5p	DI-P9	AC-P1	eliminated	
AC-C5p	combined DI-C24, 25; DI-P10, 11	MC-P4	AC-P2	combined P2, 6,7 10, 11, 13, 14	AC-P3
	MC-P1p. 3p. 4p. 9p. 11. 13-15. AC-C5p		AC-P3p	reworded	AC-P1
AC-C6	reworded	AC-C5	AC-P3p	combined P3p. 5	AC-P2
AC-C7	reworded	AC-C6	AC-P4	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C8	reworded	AC-C7		P2; PH-P6. 7; PH-CP3.2	
AC-C9	reworded	AC-C8	AC-P5	reworded	AC-P2
AC-C10	reworded	AC-C9	AC-P6	combined P2, 6, 7 10, 11, 13, 14	AC-P3
AC-C11	unchanged	AC-C10	AC-P7	combined P2, 6, 7 10, 11, 13, 14	AC-P3
AC-C12	unchanged	AC-C11	AC-P8	combined P4, 8, 9, 12, 15-21; MC- P2; PH-P6, 7; PH-CP3,2	AC-P4
AC-C13	unchanged	AC-C12	AC-P9	combined P4, 8, 9, 12, 15-21; MC-	AC D4
AC-C14	reworded	AC-C13	7.010	P2; PH-P6, 7; PH-CP3,2	AC-P4
AC-C15	combined AC-C16, MC-P16	AC-C14	AC-P10	combined P2, 6, 7 10, 11, 13, 14	AC-P3
AC-C16	reworded	AC-C15	AC-P11	combined P2, 6, 7 10, 11, 13, 14	AC-P3
AC-C17	reworded	AC-C16	AC-P12	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C18	reworded	AC-C17		P2; PH-P6, 7; PH-CP3.2	
AC-C19	reworded	AC-C18	AC-P13	combined P2, 6, 7, 10, 11, 13, 14	AC-P3
AC-C20	reworded	AC-C19	AC-P14	combined P2, 6, 7 10, 11, 13, 14	AC-P3
AC-C21	inherent in	AC-C19	AC-P15	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C22	unchanged	AC-C20	AC-P16	P2: PH-P6, 7: PH-CP3,2	
AC-C23	reworded	AC-C21	AC-F10	combined P4. 8, 9, 12, 15-21; MC- P2; PH-P6, 7; PH-CP3.2	AC-P4
AC-C24	reworded	AC-C22	AC-P17	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C25	reworded	AC-C23		P2: PH-P6. 7: PH-CP3.2	71014
AC-C26	reworded	AC-C24	AC-P18	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C27	reworded	AC-C24		P2; PH-P6, 7; PH-CP3.2	
AC-C28	reworded	AC-C24	AC-P19	combined P4, 8, 9, 12, 15-21; MC- P2: PH-P6, 7; PH-CP3,2	AC-P4
AC-C29	reworded	AC-C25	AC-P20	combined P4, 8, 9, 12, 15-21; MC-	A C D4
AC-C30	reworded	AC-C25	710 1 20	P2: PH-P6. 7: PH-CP3.2	AC-P4
AC-C31	reworded	AC-C26	AC-P21	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C32	combined C32-39	AC-C27		P2: PH-P6. 7: PH-CP3.2	
AC-C33	combined C32-39	AC-C27		new	AC-P3f
AC-C34	combined C32-39	AC-C27			
AC-C35	combined C32-39	AC-C27	AC-CP1.1	reworded	AC-CP1
AC-C36	combined C32-39	AC-C27	AC-CP1 2	reworded	AC-CP1
AC-C37	combined C32-39	AC-C27	AC-CP2.1	reworded	AC-CP1
AC-C38	combined C32-39	AC-C27	AC-CP3.1	reworded	AC-CP1
AC-C39	combined C32-39	AC-C27	AC-CP4.1	reworded	AC-CP1
AC-C40	reworded	AC-C28	AC-CP5.1	reworded	AC-CP1
AC-C41	reworded	AC-C29	AC-CP6 1	reworded	AC-CP1
AC-C42	reworded	AC-C30			

3rd Ed.	Action	4n Ed.	3rd Ed.	Action	4⊪ Ed.
	Therapeutic Modalities		EX-C3	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C1	combined C1, 9, PA-C19p	TM-C8	EX-C4	unchanged	EX-C3
TM-C2	combined C2, 3	TM-C9	EX-C5	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C3	combined C2, 3	TM-C9	EX-C6	unchanged	EX-C6
TM-C4	reworded	TM-C6	EX-C7	reworded	EX-C2
TM-C5	reworded	TM-C5	EX-C8	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C6	reworded	TM-C2	EX-C9	reworded	EX-C4
TM-C7	reworded	TM-C3	EX-C10	reworded	EX-C5
TM-C8	reworded	TM-C4	EX-C11	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C9	combined C1, 9, PA-C19p	TM-C8	EX-C12	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C10	combine C10-18	TM-C7	EX-C13	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C11	combine C10-18	TM-C7	EX-C14	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C12	combine C10-18	TM-C7	EX-C15	reworded	EX-C8
TM-C13	combine C10-18	TM-C7	EX-C16	reworded	EX-C9
TM-C14	combine C10-18	TM-C7			
TM-C15	combine C10-18	TM-C7	EX-P1p	combined P1p, 2p	EX-P1
TM-C16	combine C10-18	TM-C7	EX-P1p	combined P1p, 3	EX-P6
TM-C17	combine C10-18	TM-C7	EX-P2p	combined P1p, 2p	EX-P1
TM-C18	combine C10-18	TM-C7	EX-P2p	moved part to P1	EX-P2
TM-C19	reworded	TM-C1	EX-P3	combined P1p, 3	EX-P6
TM-C20	combine C20, 21	TM-C10	EX-P4	reworded	EX-P4
TM-C21	combine C20, 21	TM-C10	EX-P5	reworded	EX-P5
TM-C22	reworded	TM-C11	EX-P6	unchanged	EX-P7
			EX-P7	unchanged	EX-P3
TM-P1	combined P1, 3, 9p	TM-P1			
TM-P2	reworded	TM-P2	EX-CP1.1	combined CP1.1-1.10	EX-CP1
TM-P3	combined P1, 3, 9p	TM-P1	EX-CP1.2	combined CP1.1-1.10	EX-CP1
TM-P4	reworded	TM-P4	EX-CP1.3	combined CP1.1-1.10	EX-CP1
TM-P5	combined P5-7	TM-P5	EX-CP1.4	combined CP1.1-1.10	EX-CP1
TM-P6	combined P5-7	TM-P5	EX-CP1.5	combined CP1.1-1.10	EX-CP1
TM-P7	combined P5-7	TM-P5	EX-CP1.6	combined CP1.1-1.10	EX-CP1
TM-P8	reworded	TM-P2	EX-CP1.7	combined CP1.1-1.10	EX-CP1
TM-P9p	combined P1, 3, 9p	TM-P1	EX-CP1.8	combined CP1.1-1.10	EX-CP1
TM-P9p	reworded	TM-P2	EX-CP1.9	combined CP1.1-1.10	EX-CP1
TM-P9p	reworded	TM-P6	EX-CP1.10	combined CP1.1-1.10	EX-CP1
TM-P10	reworded	TM-P3			
TM-CP1.1	combined CP1.1-2	TM CD4	Dt 1 04	Pharmacology	
TM-CP1.2	combined CP1.1-2	TM-CP1	PH-C1	combined C1-3	PH-C1
TM-CP2	combined CP1.1-2	TM-CP1	PH-C2	combined C1-3	PH-C1
01 2	30mbinog 01 1.1-2	TM-CP1	PH-C3	combined C1-3	PH-C1
Conditio	ning & Rehabilitative Exercise (Th	oronouti-	PH-C4	reworded	PH-C2
- January	Exercise)	erapeutic	PH-C5	combined C5, 13-24	PH-C3
EX-C1	reworded & added PA-C19p	EX-C1	PH-C6	eliminated	
EX-C2	combined C2, 3, 5, 8, 11-14	EX-C7	PH-C7	reworded	PH-C7
		• •	PH-C8	reworded	PH-C8

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4th Ed.
PH-C9	combined C9, 10, 12	PH-C4	PS-C4p	reworded	PS-C5
PH-C10	combined C9, 10, 12	PH-C4	PS-C5	- reworded	PS-C6
PH-C11	reworded	PH-C5	PS-C6	combined C6, 7, 19	PS-C7
PH-C12	combined C9, 10, 12	PH-C4	PS-C7	combined C6, 7, 19	PS-C7
PH-C13	combined C5, 13-24	PH-C3	PS-C8	reworded	PS-C8
PH-C14	combined C5, 13-24	PH-C3	PS-C9	combine C9, 10	PS-C9
PH-C15	reworded	PH-C10	PS-C10	combine C9, 10	PS-C9
PH-C16	combined C5, 13-24	PH-C3	PS-C11	reworded	PS-C10
PH-C17	combined C5, 13-24	PH-C3	PS-C12	eliminated	
PH-C18	combined C5, 13-24	PH-C3	PS-C13	combined C12, C18	PS-C12
PH-C19	combined C5, 13-24	PH-C3	PS-C14	combined C14-17	PS-C11
PH-C20	combined C5, 13-24	PH-C3	PS-C15	combined C14-17	PS-C11
PH-C21	combined C5, 13-24	PH-C3	PS-C16	combined C14-17	PS-C11
PH-C22	combined C5, 13-24	PH-C3	PS-C17	combined C14-17	PS-C11
PH-C23	combined C5, 13-24	PH-C3	PS-C18	combined C12, C18	PS-C12
PH-C24	combined C5, 13-24	PH-C3	PS-C19	combined C6, 7, 19	PS-C7
PH-C25	reworded	PH-C10	PS-C20	combined C20-21	PS-C13
	new	PH-C11	PS-C21	combined C20-21	PS-C13
	new	PH-C6	PS-C22	combined C3p, 22	PS-C2
	new	PH-C9	PS-C23	eliminated	
			PS-C24	reworded	PS-C14
PH-P1	reworded	PH-P1	PS-C25	unchanged	PS-C3
PH-P2	combined P2-5	PH-P2		new	PS-C15
PH-P3	combined P2-5	PH-P2			
PH-P4	combined P2-5	PH-P2	PS-P1	eliminated	
PH-P5	combined P2-5	PH-P2	PS-P2	eliminated	
PH-P6	combined P4, 8, 9, 12, 15-21; MC-	AC-P4	PS-P3	eliminated	
Dt.1 D7	P2; PH-P6, 7; PH-CP3.2	4 C D4	PS-P4	eliminated	
PH-P7	combined P4, 8, 9, 12, 15-21; MC- P2; PH-P6, 7; PH-CP3.2	AC-P4	PS-P5	eliminated	
	new	PH-P3	PS-P6	eliminated	
PH-CP1.1	eliminated		PS-CP1.1	combined CP1.1-1.3	PS-CP1
PH-CP1.2	eliminated		PS-CP1.2	combined CP1.1-1.3	PS-CP1
PH-CP1.3	eliminated		PS-CP1.3	combined CP1.1-1.3	PS-CP1
PH-CP2.1	eliminated		PS-CP2.1	reworded	PS-CP2
PH-CP3.1	eliminated				
PH-CP3.2	combined P4, 8, 9, 12, 15-21; MC-	AC.PA	N	lutritional Aspects of Injury & II	ness
111 01 5.2	P2; PH-P6, 7; PH-CP3.2	A0-1 4	NU-C1	combined C1, 6	NU-C1
			NU-C2	eliminated	
P	sychosocial Intervention & Referral		NU-C3	reworded	NU-C2
PS-C1	eliminated		NU-C4	reworded	NU-C3
PS-C2	reworded	PS-C1	NU-C5	reworded	NU-C4
PS-C3	combined C3p, 22	PS-C2	NU-C6	combined C1, 6	NU-C1
PS-C4p	reworded	PS-C3	NU-C7	combined C7. 9	NU-C5
PS-C4p	reworded	PS-C4	NU-C8	reworded	NU-C6

3rd Ed.	Action	4m Ed.	3rd Ed.	Action	4н Ed.
NU-C9	combined C7, 9	NU-C5	AD-C8	combined C8, 43	AD-C8
NU-C10p	combined C10p, C25	NU-C15	AD-C9	in ProfDevIp	PD-C1
NU-C10p	reworded	NU-C7	AD-C10	combined C9, 10	AD-C9
NU-C11	reworded	NU-C8	AD-C11	combined C9, 10	AD-C9
NU-C12	combined C12, 17, 20, 21	NU-C12	AD-C12	combined C12, 13	AD-C10
NU-C13	combined C13, 14	NU-C9	AD-C13	combined C12, 13	AD-C10
NU-C14	combined C13, 14	NU-C9	AD-C14p	reworded	AD-C11
NU-C15	reworded	NU-C10	AD-C14p	combined DI-C27, AD-C14p	DI-C17
NU-C16	reworded	NU-C11	AD-C14p	combined CP1.1-1.9, AD-C14p	MC-CP1
NU-C17	combined C12, 17, 20, 21	NU-C12	AD-C15	reworded	AD-C12
NU-C18	reworded	NU-C13	AD-C16	reworded	AD-C13
NU-C19	reworded	NU-C19	AD-C17	combined C2, 3, 5, 17, 20	AD-C5
NU-C20	combined C12, 17, 20, 21	NU-C12	AD-C18	reworded	AD-C14
NU-C21	combined C12, 17, 20, 21	NU-C12	AD-C19	unchanged	AD-C6
NU-C22	reworded	NU-C18	AD-C20	combined C2, 3, 5, 17, 20	AD-C5
NU-C23	combined C23, 24	NU-C14	AD-C21	combined C21-23, 25-27	AD-C15
NU-C24	combined C23, 24	NU-C14	AD-C22	combined C21-23, 25-27	AD-C15
NU-C25	combined C10p, C25	NU-C15	AD-C23	combined C21-23, 25-27	AD-C15
NU-C26	reworded	NU-C16	AD-C24	eliminated	
NU-C27	reworded	NU-C17	AD-C25	combined C21-23, 25-27	AD-C15
	new	NU-C20	AD-C26	combined C21-23, 25-27	AD-C15
			AD-C27	combined C21-23, 25-27	AD-C15
NU-P1	combined P1-4	NU-P3	AD-C28	reworded	AD-C17
NU-P2	combined P1-4	NU-P3	AD-C29	combined C7, 17	AD-C7
NU-P3	combined P1-4	NU-P3	AD-C30	reworded	AD-C18
NU-P4	combined P1-4	NU-P3	AD-C31	combined C31, 33, 35, 36, 45	AD-C20
	new	NU-P1	AD-C32	reworded	AD-C19
	new	NU-P2	AD-C33	combined C31, 33, 35, 36, 45	AD-C20
			AD-C34	in PsychoSoc	PS-C7
NU-CP1.1	combined CP1.1-1.5	NU-CP1	AD-C35	combined C31, 33, 35, 36, 45	AD-C20
NU-CP1.2	combined CP1.1-1.5	NU-CP1	AD-C36	combined C31, 33, 35, 36, 45	AD-C20
NU-CP1.3	combined CP1.1-1.5	NU-CP1	AD-C37	reworded	AD-C21
NU-CP1.4	combined CP1.1-1.5	NU-CP1	AD-C38	combined C38-39	AD-C22
NU-CP1.5	combined CP1.1-1.5	NU-CP1	AD-C39	combined C38-39	AD-C22
NU-CP1.6	reworded	NU-CP2	AD-C40	in ProfDevIp	PD-C3
NU-CP1.7	reworded	NU-CP2	AD-C41	in ProfDevlp	PD-C9
			AD-C42	in ProfDevlp	PD-C5
	Administration		AD-C43	combined C8, 43	AD-C8
AD-C1	reworded	AD-C1	AD-C44	in ProfDevIp	PD-C7
AD-C2	combined C2, 3, 5, 17, 20	AD-C2	AD-C45	combined C31, 33, 35, 36, 45	AD-C20
AD-C3	combined C2, 3, 5, 17, 20	AD-C2	AD-C46	combined AD-C46, AD-P8	PD-P4
AD-C4	reworded	AD-C3			
AD-C5	combined C2, 3, 5, 17, 20	AD-C2	AD-P1	reworded	AD-P1
AD-C6	reworded	AD-C4	AD-P2	reworded	AD-P2
AD-C7	combined C7, 17	AD-C7	AD-P3	reworded	AD-P3

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4 _{th} Ed.
AD-P4	unchanged	AD-P4			
AD-P5	reworded	AD-P5			
AD-P6	reworded	AD-P7			
AD-P7	unchanged	AD-P8			
AD-P8	combined AD-C46, AD-P8	PD-P4			
	new	AD-P6			
AD-CP1.1	eliminated				
AD-CP2.1	eliminated				
AD-CP3.1	eliminated				
AD-CP4.1	eliminated				
AD-CP4.2	eliminated				
AD-CP5.1	eliminated				

Professional Development & Responsibilities

PD-C1	combined C1-C4	PD-C1
PD-C2	combined C1-C4	PD-C1
PD-C3	combined C1-C4	PD-C1
PD-C4	combined C1-C4	PD-C1
PD-C5	reworded	PD-C2
PD-C6	combined C6, 7	PD-C3
PD-C7	combined C6, 7	PD-C3
PD-C8	unchanged	PD-C4
PD-C9	reworded	PD-C5
PD-C10	reworded	PD-C6
PD-C11	combined C8, 14	PD-C8
PD-C12	reworded	PD-C9
PD-C13	reworded	PD-C10
PD-C14	combined C8, 14	PD-C8
PD-C15	reworded	PD-C11
PD-C16	reworded	PD-C12
	new	PD-C7
	new	PD-C13
	new	PD-C14
	new	PD-C16
PD-P1	enworderd	50.54
PD-P2	reworded eliminated	PD-P1
PD-P3		55.50
	reworded	PD-P2
PD-CP1.1	reworded	PD-P3
PD-CP1.2	reworded	PD-C15

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4n Ed.
R	isk Management & Injury Pres	vention		new	RM-P6p
RM-C1	reworded	RM-C1			,
MC-C2p	in Risk Mngt	RM-C2	RM-CP2.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C2	reworded	RM-C2	RM-CP5.1	combined CP2.1, 5.1-7.2	RM-CP1
	new	RM-C3	RM-CP5.2	combined CP2.1, 5.1-7.2	RM-CP1
RM-C3	reworded	RM-C4	RM-CP5.3	combined CP2.1, 5.1-7.2	RM-CP1
RM-C4	reworded	RM-C5	RM-CP5.4	combined CP2.1, 5.1-7.2	RM-CP1
MC-C3	in Risk Mngt	RM-C6	RM-CP5.5	combined CP2.1, 5.1-7.2	RM-CP1
	new	RM-C6	RM-CP6.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C5	reworded and added "AED"	RM-C7	RM-CP7.1	combined CP2.1, 5.1-7.2	RM-CP1
RM-C6	reworded	RM-C8	RM-CP7.2	combined CP2.1, 5.1-7.2	RM-CP1
RM-C7	reworded	RM-C9	RM-CP4.1	combined CP4.1, 8.1-9.1	RM-CP2
RM-C8	reworded	RM-C10	RM-CP8.1	combined CP4.1, 8.1-9.1	RM-CP2
RM-C9	reworded	RM-C11	RM-CP9.1	combined CP4.1, 8.1-9.1	RM-CP2
RM-C11	reworded	RM-C12	RM-CP3.1	reworded	RM-CP3
RM-C10	combined C10, 12-14	RM-C13	RM-CP1.1	eliminated	
RM-C12	combined C10, 12-14	RM-C13			
RM-C13	combined C10, 12-14	RM-C13		Pathology of Injuries & Iliness	
RM-C14	combined C10, 12-14	RM-C13	PA-C13	combined MC-C31-33, PA-C13	MC-C16
RM-C15	combined C15, 16	RM-C14	PA-C1	reworded	PA-C1
RM-C16	combined C15, 16	RM-C14	PA-C10p	combined C6, 8, 9p, 10p, 11, 13,	PA-C2
PA-C16	in RM	RM-C15		14p, 15, 17	
RM-C17	reworded	RM-C15	PA-C14p	combined C6, 8, 9p, 10p, 11, 13,	PA-C2
RM-C18	combined C18-20	RM-C16	PA-C3	14p, 15, 17	5. 66
RM-C19	combined C18-20	RM-C16		combined C3, 9p-10p, 14p	PA-C2
RM-C20	combined C18-20	RM-C16	PA-C9p	combined C6, 8, 9p, 10p, 11, 13, 14p, 15, 17	PA-C2
RM-C21	combined C21, 22	RM-C17	PA-C5	reworded	PA-C3
RM-C22	combined C21, 22	RM-C17	MC-C16	in Pathology	PA-C4
RM-C23	combined C23, 24	RM-C18	PA-C10p	combined C3, 9p-10p, 14p	PA-C4
RM-C24	combined C23, 24	RM-C18	PA-C11	combined C6, 8, 9p, 10p, 11, 13,	PA-C4
RM-C25	reworded	RM-C19		14p, 15, 17	.,,,,
	new	RM-C20	PA-C14p	combined C3, 9p-10p, 14p	PA-C4
RM-P1	combined P1-3, 6, 7	RM-P1	PA-C15	combined C6, 8, 9p, 10p, 11, 13, 14p, 15, 17	PA-C4
RM-P2	combined P1-3, 6, 7	RM-P1	PA-C17	combined C6, 8, 9p, 10p, 11, 13,	PA-C4
RM-P3	combined P1-3, 6, 7	RM-P1		14p, 15, 17	
RM-P6	combined P1-3, 6, 7	RM-P1	PA-C6	combined C6, 8, 9p, 10p, 11, 13,	PA-C4
RM-P7	combined P1-3, 6, 7	RM-P1	PA-C8	14p, 15, 17	
RM-P11	reworded	RM-P2	PA-00	combined C6, 8, 9p, 10p, 11, 13, 14p, 15, 17	PA-C4
RM-P10	reworded	RM-P3	PA-C9p	combined C3, 9p-10p, 14p	PA-C4
RM-P12	reworded	RM-P4	PA-C12	reworded	PA-C5
RM-P9	reworded	RM-P4	PA-C18	reworded	PA-C5
RM-P8	reworded	RM-P5	DI-C20	combined PA-C7, DI-C20	PA-C6
RM-P4	combined P4, 5	RM-P6	PA-C7	combined PA-C7, DI-C20	PA-C6
RM-P5	combined P4, 5	RM-P6	PA-C2	eliminated	FA-60
	·, -			S. Carriero	

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4th Ed.
PA-C4	eliminated				
			DI-CP1.1	combined CP1.1-6	DI-CP1
Ortho	pedic Assessment and Diagnos	is (Injury	DI-CP1.2		DI-CP1
	Evaluation)		DI-CP1.3	combined CP1.1-6	DI-CP1
DI-C1	reworded	DI-C1	DI-CP2.1	combined CP1.1-6	DI-CP1
DI-C13	reworded	DI-C12	DI-CP3.1	combined CP1.1-6	DI-CP1
DI-C2	reworded	DI-C2	DI-CP4.1	combined CP1.1-6	DI-CP1
DI-C3	reworded	DI-C3	DI-CP5.1	combined CP1.1-6	DI-CP1
DI-C4	reworded	DI-C4	DI-CP6	combined CP1.1-6	DI-CP1
DI-C5	reworded	DI-C5			
DI-C7	combined C7, 9	DI-C6	Medical	l Conditions & Disabilities (Gene	eral Medical
DI-C9	combined C7, 9	DI-C6		Conditions & Disabilities)	······································
DI-C8	unchanged	DI-C7	MC-C1	reworded	MC-C1
DI-C10	combined C10-12	DI-C8	MC-C2p	reworded	MC-C2
DI-C11	combined C10-12	DI-C8		new	MC-C3
DI-C12	combined C10-12	DI-C8	MC-C4	reworded	MC-C4
DI-C14	reworded	DI-C10	MC-C5	reworded	MC-C5
	new	DI-C11	MC-C6	reworded	MC-C6
DI-C15	reworded	DI-C12	MC-C10	combined C7, 10, 34p	MC-C7
DI-C16	reworded	DI-C13	MC-C34p	combined C7, 10, 34p	MC-C7
DI-C19	reworded	DI-C14	MC-C7	combined C7, 10, 34p	MC-C7
DI-C21	reworded	DI-C15	MC-C8	reworded	MC-C8
DI-C26	reworded	DI-C16	MC-C9	unchanged	MC-C9
AD-C14p	combined DI-C27, AD-C14p	DI-C17	MC-C11	reworded	MC-C10
DI-C27	combined DI-C27, AD-C14p	DI-C17	MC-C14	combined C14, 15, 19, 30	MC-C11
DI-C17	eliminated		MC-C15	combined C14, 15, 19, 30	MC-C11
DI-C18	eliminated		MC-C19	combined C14, 15, 19, 30	MC-C11
DI-C6	eliminated		MC-C30	combined C14, 15, 19, 30	MC-C11
			DI-C22p	combined MC-C17p; DI-C17p,	MC-C12
DI-P1	reworded	DI-P1		C22p	
DI-P2	reworded	DI-P2	DI-C23	combined MC-C17p; DI-C17p,	MC-C12
DI-P6	reworded	DI-P3	MC-C17p	C22p	
DI-P12	combined DI-P12, 13p	DI-P4	1VIO-C17P	combined MC-C17p; DI-C17p, C22p	MC-C12
DI-P13p	combined DI-P12, 13p	DI-P4	MC-C17p	combined MC-C17p, 18	MC-C13
DI-P3p	reworded and added "inclinometer"	DI-P5	MC-C18	combined MC-C17p, 18	MC-C13
DI-P4	reworded and added "inclinometer"	DI-P5	DI-C22p	combined MC-C20-25; DI-C22p	MC-C14
DI-P3p	combined DI-P3, 5	DI-P6	MC-C20	combined MC-C20-25; DI-C22p	MC-C14
DI-P5	combined DI-P3, 5	DI-P6	MC-C21	combined MC-C20-25: DI-C22p	MC-C14
DI-P7	reworded	DI-P7	MC-C22	combined MC-C20-25; DI-C22p	MC-C14
DI-P8	reworded	DI-P7	MC-C23	combined MC-C20-25: DI-C22p	MC-C14
DI-P9	reworded	DI-P8	MC-C24	combined MC-C20-25: DI-C22p	MC-C14
AC-C5p	combined DI-P14, AC-C5p	DI-P9	MC-C25	combined MC-C20-25; DI-C22p	MC-C14
DI-P14	combined DI-P14, AC-C5p	DI-P9	MC-C27	combined MC-C27, 28, 34p, P6	MC-C14 MC-C15
DI-P17	reworded	DI-P10	MC-C28	combined MC-C27, 28, 34p, P6	MC-C15
DI-P15	eliminated		MC-C34p	combined MC-C27, 28, 34p, P6	MC-C15 MC-C15
					WIO-013

3rd Ed.	Action	4th Ed.	3ra Ed.	Action	4 _њ Еd.
MC-P6	combined MC-C27, 28, 34p, P6	MC-C15	MC-P10	combined DI-C24, 25; DI-P10, 11;	MC-P4
MC-C26	combined C26, 29, 34p-36	MC-C16		MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	
MC-C29	combined C26, 29, 34p-36	MC-C16		C5p	
MC-C34p	combined C26, 29, 34p-36	MC-C16	MC-P11	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	MC-P4
MC-C35	combined C26, 29, 34p-36	MC-C16		C5p	
MC-C36	combined C26, 29, 34p-36	MC-C16	MC-P13	combined DI-C24, 25; DI-P10, 11;	MC-P4
DI-P16		MC-C17		MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	
MC-C31	combined MC-C31-33, P8p; DI-P16	MC-C17	NO D44	C5p	
MC-C32	combined MC-C31-33, P8p; DI-P16	MC-C17	MC-P14	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	MC-P4
MC-C33	combined MC-C31-33, P8p; DI-P16	MC-C17		C5p	
MC-P8p	combined MC-C31-33, P8p; DI-P16	MC-C17	MC-P15	combined DI-C24, 25; DI-P10, 11;	MC-P4
	new	MC-C18		MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	
	new	MC-C18	140 D4=	C5p	
MC-C37	reworded	MC-C19	MC-P1p	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	MC-P4
MC-P8p	reworded	MC-C19		C5p	
	new	MC-C20	MC-P3p	combined DI-C24, 25; DI-P10, 11;	MC-P4
	new	MC-C22		MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	
MC-C12	elíminated		MC D4=	C5p	140.54
MC-C13	eliminated		MC-P4p	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-C5p	MC-P4
MC-P1p	combined P1p, 3p, 4p	MC-P1	MC-P9	combined DI-C24, 25; DI-P10, 11;	MC-P4
MC-P3p	combined P1p, 3p, 4p	MC-P1		MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	
MC-P4p	combined P1p, 3p, 4p	MC-P1	MC D47	C5p	
MC-P1p	combined P1p, 3p, 4p	MC-P2	MC-P17	eliminated	
MC-P3p	combined P1p, 3p, 4p	MC-P2	AD C44=		
MC-P4p	combined P1p, 3p, 4p	MC-P2	AD-C14p	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P12	combined P1p, 3p, 4p, 12, DI-P13p	MC-P3	MC-CP1.1	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P1p	combined P1p, 3p, 4p, 12, DI-P13p	MC-P3	MC-CP1.2	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P3p	combined P1p, 3p, 4p, 12, DI-P13p	MC-P3	MC-CP1.3	combined CP1.1-1.9, AD-C14p	MC-CP1
MC-P4p	combined P1p, 3p, 4p, 12, DI-P13p	MC-P3	MC-CP1.4	combined CP1.1-1.9, AD-C14p	MC-CP1
DI-P13p	combined P1p, 3p, 4p, 12, DI-P13p	MC-P3	MC-CP1.5	combined CP1.1-1.9, AD-C14p	MC-CP1
AC-C5p	combined DI-C24, 25; DI-P10, 11;	MC-P4	MC-CP1.6	combined CP1.1-1.9, AD-C14p	MC-CP1
,	MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-		MC-CP1.7	combined CP1.1-1.9, AD-C14p	MC-CP1
	C5p		MC-CP1.8	combined CP1.1-1.9, AD-C14p	MC-CP1
DI-C24	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-C5p	MC-P4	MC-CP1.9	combined CP1.1-1.9, AD-C14p	MC-CP1
DI-C25	combined DI-C24, 25; DI-P10, 11;	MC-P4		Acute Care	
	MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-C5p	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	AC-C1 AC-C2	unchanged unchanged	AC-C1 AC-C2
DI-P10	combined DI-C24, 25; DI-P10, 11;	MC-P4	AC-C3	reworded	AC-C3
	MC-P1p, 3p, 4p, 9p, 11, 13-15, AC- C5p		AC-C4	unchanged	AC-C4
DI-P11	•	NC D4	AC-C6	reworded	AC-C5
UI-F I I	combined DI-C24, 25; DI-P10, 11; MC-P1p, 3p, 4p, 9p, 11, 13-15, AC-	MC-P4	AC-C7	reworded	AC-C6
	C5p		AC-C8	reworded	AC-C7
			AC-C9	reworded	AC-C8
			AC-C10	reworded	AC-C9

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4th Ed.
AC-C11	unchanged	AC-C10	AC-P13	combined P2, 6,7 10, 11, 13, 14,	AC-P3
AC-C12	unchanged	AC-C11	AC-P14	combined P2, 6,7 10, 11, 13, 14,	AC-P3
AC-C13	unchanged	AC-C12	AC-P2	combined P2, 6,7 10, 11, 13, 14,	AC-P3
AC-C14	reworded	AC-C13	AC-P6	combined P2, 6,7 10, 11, 13, 14,	AC-P3
AC-C15	combined AC-C16, MC-P16	AC-C14	AC-P7	combined P2, 6,7 10, 11, 13, 14,	AC-P3
MC-P16	combined AC-C16, MC-P16	AC-C14		new	AC-P3f
AC-C16	reworded	AC-C15	AC-P12	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C17	reworded	AC-C16		P2; PH-P6, 7; PH-CP3.2	
AC-C18	reworded	AC-C17	AC-P15	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C19	reworded	AC-C18	A.C. D4C	P2; PH-P6, 7; PH-CP3.2	10.54
AC-C20	reworded	AC-C19	AC-P16	combined P4, 8, 9, 12, 15-21; MC- P2; PH-P6, 7; PH-CP3.2	AC-P4
AC-C21	inherent in	AC-C19	AC-P17	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C22	unchanged	AC-C20		P2; PH-P6, 7; PH-CP3.2	,,,,,,,
AC-C23	reworded	AC-C21	AC-P18	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C24	reworded	AC-C22		P2; PH-P6, 7; PH-CP3.2	
AC-C25	reworded	AC-C23	AC-P19	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C26	reworded	AC-C24	AC-P20	P2; PH-P6, 7; PH-CP3.2 combined P4, 8, 9, 12, 15-21; MC-	A C D A
AC-C27	reworded	AC-C24	AU-F20	P2; PH-P6, 7; PH-CP3.2	AC-P4
AC-C28	reworded	AC-C24	AC-P21	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C29	reworded	AC-C25		P2; PH-P6, 7; PH-CP3.2	
AC-C30	reworded	AC-C25	AC-P4	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C31	reworded	AC-C26	40.50	P2; PH-P6, 7; PH-CP3.2	
AC-C32	combined C32-39	AC-C27	AC-P8	combined P4, 8, 9, 12, 15-21; MC- P2; PH-P6, 7; PH-CP3.2	AC-P4
AC-C33	combined C32-39	AC-C27	AC-P9	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C34	combined C32-39	AC-C27	71010	P2; PH-P6, 7; PH-CP3.2	A0-14
AC-C35	combined C32-39	AC-C27	MC-P2	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C36	combined C32-39	AC-C27		P2; PH-P6, 7; PH-CP3.2	
AC-C37	combined C32-39	AC-C27	PH-CP3.2	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
AC-C38	combined C32-39	AC-C27	DU De	P2; PH-P6, 7; PH-CP3.2	10.51
AC-C39	combined C32-39	AC-C27	PH-P6	combined P4, 8, 9, 12, 15-21; MC- P2; PH-P6, 7; PH-CP3.2	AC-P4
MC-P5	in Acute Care	AC-C27	PH-P7	combined P4, 8, 9, 12, 15-21; MC-	AC-P4
MC-P7	in Acute Care	AC-C27		P2; PH-P6, 7; PH-CP3.2	
AC-C40	reworded	AC-C28	AC-P1	eliminated	
AC-C41	reworded	AC-C29			
AC-C42	reworded	AC-C30	AC-CP1.1	reworded	AC-CP1
AC-C43	reworded	AC-C31	AC-CP1.2	reworded	AC-CP1
AC-C44	reworded	AC-C32	AC-CP2.1	reworded	AC-CP1
AC-C45	reworded	AC-C32	AC-CP3.1	reworded	AC-CP1
AC-C46	reworded	AC-C33	AC-CP4.1	reworded	AC-CP1
			AC-CP5.1	reworded	AC-CP1
AC-P3p	reworded	AC-P1	AC-CP6.1	reworded	AC-CP1
AC-P3p	combined P3p, 5	AC-P2			
AC-P5	reworded	AC-P2		Therapeutic Modalities	
AC-P10	combined P2, 6,7 10, 11, 13, 14.	AC-P3	PA-C19p	combined TM-C1, PA-C19p	TM-C1
AC-P11	combined P2. 6,7 10. 11. 13, 14.	AC-P3	TM-C19	reworded	TM-C1

3rd Ed.	Action	4 _{th} Ed.	3rd Ed.	Action	4 _™ Ed.
TM-C6	reworded	TM-C2	EX-C4	unchanged	EX-C3
TM-C7	reworded	TM-C3	EX-C9	•	
TM-C8	reworded	TM-C4	EX-C10		
TM-C5	reworded	TM-C5	EX-C6		
TM-C4	reworded	TM-C6	EX-C11	combined C2, 3, 5, 8, 11-14	EX-C6 EX-C7
TM-C10	combine C10-18	TM-C7	EX-C12	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C11	combine C10-18	TM-C7	EX-C13	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C12	combine C10-18	TM-C7	EX-C14	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C13	combine C10-18	TM-C7	EX-C2	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C14	combine C10-18	TM-C7	EX-C3	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C15	combine C10-18	TM-C7	EX-C5	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C16	combine C10-18	TM-C7	EX-C8	combined C2, 3, 5, 8, 11-14	EX-C7
TM-C17	combine C10-18	TM-C7	EX-C15	reworded	EX-C8
TM-C18	combine C10-18	TM-C7	EX-C16	reworded	EX-C9
PA-C19p	combined C1, 9, PA-C19p	TM-C8			
TM-C1	combined C1, 9, PA-C19p	TM-C8	EX-P1p	combined P1p, 2p	EX-P1
TM-C9	combined C1, 9, PA-C19p	TM-C8	EX-P2p	combined P1p, 2p	EX-P1
TM-C2	combined C2, 3	TM-C9	EX-P2p	moved part to P1	EX-P2
TM-C3	combined C2, 3	TM-C9	EX-P7	unchanged	EX-P3
TM-C20	combine C20, 21	TM-C10	EX-P4	reworded	EX-P4
TM-C21	combine C20, 21	TM-C10	EX-P5	reworded	EX-P5
TM-C22	reworded	TM-C11	EX-P1p	combined P1p, 3	EX-P6
			EX-P3	combined P1p, 3	EX-P6
TM-P1	combined P1, 3, 9p	TM-P1	EX-P6	unchanged	EX-P7
TM-P3	combined P1, 3, 9p	TM-P1			
TM-P9p	combined P1, 3, 9p	TM-P1	EX-CP1.1	combined CP1.1-1.10	EX-CP1
TM-P2	reworded	TM-P2	EX-CP1.10	combined CP1.1-1.10	EX-CP1
TM-P8	reworded	TM-P2	EX-CP1.2	combined CP1.1-1.10	EX-CP1
TM-P9p	reworded	TM-P2	EX-CP1.3	EX-CP1.3 combined CP1.1-1.10	
TM-P10	reworded	TM-P3	EX-CP1.4	EX-CP1.4 combined CP1.1-1.10	
TM-P4	reworded	TM-P4	EX-CP1.5	EX-CP1.5 combined CP1.1-1.10	
TM-P5	combined P5-7	TM-P5	EX-CP1.6	EX-CP1.6 combined CP1.1-1.10	
TM-P6	combined P5-7	TM-P5	EX-CP1.7	EX-CP1.7 combined CP1.1-1.10	
TM-P7	combined P5-7	TM-P5	EX-CP1.8	combined CP1.1-1.10	EX-CP1
TM-P9p	reworded	TM-P6	EX-CP1.9	combined CP1.1-1.10	EX-CP1
TM-CP1.1	combined CP1.1-2	TM-CP1		Pharmacology	
TM-CP1.2	combined CP1.1-2	TM-CP1	PH-C1	Combined C1-3	PH-C1
TM-CP2	combined CP1.1-2	TM-CP1	PH-C2	Combined C1-3	PH-C1
			PH-C3	Combined C1-3	PH-C1
Condition	ing & Rehabilitative Exercise	(Therapeutic	PH-C4	reworded	PH-C2
	Exercise)		PH-C13	combined C5, 13, 14, 15-24	PH-C3
EX-C1	reworded & added PA-C19p	EX-C1	PH-C14	combined C5, 13, 14, 15-24	PH-C3
PA-C19p	combined EX-C1, PA-C19p	EX-C1	PH-C16	combined C5, 13, 14, 15-24	PH-C3
EX-C7	reworded	EX-C2	PH-C17	combined C5, 13, 14, 15-24	PH-C3

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4th Ed.
PH-C18	combined C5, 13, 14, 15-24	PH-C3	PS-C6	combined C6, 7, 19	PS-C7
PH-C19	combined C5, 13, 14, 15-24	PH-C3	PS-C7	combined C6, 7, 19	PS-C7
PH-C20	combined C5, 13, 14, 15-24	PH-C3	PS-C8	reworded	PS-C8
PH-C21	combined C5, 13, 14, 15-24	PH-C3	PS-C10	combined C9, 10	PS-C9
PH-C22	combined C5, 13, 14, 15-24	PH-C3	PS-C9	combined C9, 10	PS-C9
PH-C23	combined C5, 13, 14, 15-24	PH-C3	PS-C11	reworded	PS-C10
PH-C24	combined C5, 13, 14, 15-24	PH-C3	PS-C14	combined C14-17	PS-C11
PH-C5	combined C5, 13, 14, 15-24	PH-C3	PS-C15	combined C14-17	PS-C11
PH-C10	combined C9, 10, 12	PH-C4	PS-C16	combined C14-17	PS-C11
PH-C12	combined C9, 10, 12	PH-C4	PS-C17	combined C14-17	PS-C11
PH-C9	combined C9, 10, 12	PH-C4	PS-C13	combined C12, C18	PS-C12
PH-C11	reworded	PH-C5	PS-C18	combined C12, C18	PS-C12
	new	PH-C6	PS-C20	combined C20-21	PS-C13
PH-C7	reworded	PH-C7	PS-C21	combined C20-21	PS-C13
PH-C8	reworded	PH-C8	PS-C24	reworded	PS-C14
	new	PH-C9		new	PS-C15
PH-C15	reworded	PH-C10	PS-C1	eliminated	
PH-C25	reworded	PH-C10	PS-C12	eliminated	
	new	PH-C11	PS-C23	eliminated	
PH-C6	eliminated				
			PS-P1	eliminated	
PH-P1	reworded	PH-P1	PS-P2	eliminated	
PH-P2	combined P2-5	PH-P2	PS-P3	eliminated	
PH-P3	combined P2-5	PH-P2	PS-P4	eliminated	
PH-P4	combined P2-5	PH-P2	PS-P5	eliminated	
PH-P5	combined P2-5	PH-P2	PS-P6	eliminated	
	new	PH-P3			
			PS-CP1.1	combined CP1.1-1.3	PS-CP1
PH-CP1.1	eliminated		PS-CP1.2	combined CP1.1-1.3	PS-CP1
PH-CP1.2	eliminated		PS-CP1.3	combined CP1,1-1,3	PS-CP1
PH-CP1.3	eliminated		PS-CP2.1	reworded	PS-CP2
PH-CP2.1	eliminated				. 0 0, 2
PH-CP3.1	eliminated		Nu	itritional Aspects of Injury	& Illness
			NU-C1	combined C1, 6	NU-C1
Ps	ychosocial Intervention & R	eferral	NU-C6	combined C1, 6	NU-C1
PS-C2	reworded	PS-C1	NU-C3	reworded	NU-C2
PS-C22	combined C3p, 22	PS-C2	NU-C4	reworded	NU-C3
PS-C3	combined C3p, 22	PS-C2	NU-C5	reworded	NU-C3
PS-C25	unchanged	PS-C3	NU-C7	combined C7, 9	NU-C5
PS-C4p	reworded	PS-C3	NU-C9	combined C7, 9	NU-C5 NU-C5
PS-C4p	reworded	PS-C4	NU-C8	reworded	
PS-C4p	reworded	PS-C5	NU-C10p	reworded	NU-C6
PS-C5	reworded	PS-C6	NU-C10p	reworded	NU-C7
AD-C34	in PsychoSoc	PS-C7	NU-C13		NU-C8
PS-C19	combined C6, 7, 19	PS-C7	NU-C13	combined C13, 14	NU-C9
		1 0-01	₹₩0+014	combined C13, 14	NU-C9

3₁₃ Ed.	Action	4n Ed.	3rd Ed.	Action	4տ Ed.
NU-C15	reworded	NU-C10	AD-C43	combined C8, 43	AD-C8
NU-C16	reworded	NU-C11	AD-C8	combined C8, 43	AD-C8
NU-C12	combined C12, 17, 20, 21	NU-C12	AD-C10	combined C9, 10	AD-C9
NU-C17	combined C12, 17, 20, 21	NU-C12	AD-C11	combined C9, 10	AD-C9
NU-C20	combined C12, 17, 20, 21	NU-C12	AD-C12	combined C12, 13	AD-C10
NU-C21	combined C12, 17, 20, 21	NU-C12	AD-C13	combined C12, 13	AD-C10
NU-C18	reworded	NU-C13	AD-C14p	reworded	AD-C11
NU-C23	combined C23, 24	NU-C14	AD-C15	reworded	AD-C12
NU-C24	combined C23, 24	NU-C14	AD-C16	reworded	AD-C13
NU-C10p	combubed C10p, C25	NU-C15	AD-C18	reworded	AD-C14
NU-C25	combubed C10p, C25	NU-C15	AD-C21	combined C21-23, 25-27	AD-C15
NU-C26	reworded	NU-C16	AD-C22	combined C21-23, 25-27	AD-C15
NU-C27	reworded	NU-C17	AD-C23	combined C21-23, 25-27	AD-C15
NU-C22	reworded	NU-C18	AD-C25	combined C21-23, 25-27	AD-C15
NU-C19	reworded	NU-C19	AD-C26	combined C21-23, 25-27	AD-C15
	new	NU-C20	AD-C27	combined C21-23, 25-27	AD-C15
NU-C2	eliminated		AD-C28	reworded	AD-C17
			AD-C30	reworded	AD-C18
	new	NU-P1	AD-C32	reworded	AD-C19
	new	NU-P2	AD-C31	combined C31, 33, 35, 36, 45	AD-C20
NU-P1	combined P1-4	NU-P3	AD-C33	combined C31, 33, 35, 36, 45	AD-C20
NU-P2	combined P1-4	NU-P3	AD-C35	combined C31, 33, 35, 36, 45	AD-C20
NU-P3	combined P1-4	NU-P3	AD-C36	combined C31, 33, 35, 36, 45	AD-C20
NU-P4	combined P1-4	NU-P3	AD-C45	combined C31, 33, 35, 36, 45	AD-C20
			AD-C37	reworded	AD-C21
NU-CP1.1	combined CP1.1-1.5	NU-CP1	AD-C38	combined C38-39	AD-C22
NU-CP1.2	combined CP1.1-1.5	NU-CP1	AD-C39	combined C38-39	AD-C22
NU-CP1.3	combined CP1.1-1.5	NU-CP1	AD-C24	eliminated	
NU-CP1.4	combined CP1.1-1.5	NU-CP1			
NU-CP1.5	combined CP1.1-1.5	NU-CP1	AD-P1	reworded	AD-P1
NU-CP1.6	reworded	NU-CP2	AD-P2	reworded	AD-P2
NU-CP1.7	reworded	NU-CP2	AD-P3	reworded	AD-P3
			AD-P4	unchanged	AD-P4
	Administration		AD-P5	reworded	AD-P5
AD-C1	reworded	AD-C1		new	AD-P6
AD-C2	combined C2, 3, 5, 17, 20	AD-C2	AD-P6	reworded	AD-P7
AD-C3	combined C2, 3, 5, 17, 20	AD-C2	AD-P7	unchanged	AD-P8
AD-C5	combined C2, 3, 5, 17, 20	AD-C2			
AD-C4	reworded	AD-C3	AD-CP1.1	eliminated	
AD-C6	reworded	AD-C4	AD-CP2.1	eliminated	
AD-C17	combined C2, 3, 5, 17, 20	AD-C5	AD-CP3.1	eliminated	
D-C20	combined C2, 3, 5, 17, 20	AD-C5	AD-CP4.1	eliminated	
AD-C19	unchanged	AD-C6	AD-CP4.2	eliminated	
AD-C29	combined C7, 17	AD-C7	AD-CP5.1	eliminated	
AD-C7	combined C7, 17	AD-C7			

3rd Ed.	Action	4th Ed.	3rd Ed.	Action	4n Ed.
Professional Development & Responsibilities					
AD-C9	ın ProfDevip	PD-C1			
PD-C1	combined C1-C4	PD-C1			
PD-C2	combined C1-C4	PD-C1			
PD-C3	combined C1-C4	PD-C1			
PD-C4	combined C1-C4	PD-C1			
PD-C5	reworded	PD-C2			
AD-C40	in ProfDevlp	PD-C3			
PD-C6	combined C6, 7	· PD-C3			
PD-C7	combined C6, 7	PD-C3			
PD-C8	unchanged	PD-C4			
AD-C42	in ProfDevlp	PD-C5			
PD-C9	reworded	PD-C5			
PD-C10	reworded	PD-C6			
AD-C44	in ProfDevIp	PD-C7			
	new	PD-C7			
PD-C11	combined C8, 14	PD-C8			
PD-C14	combined C8, 14	PD-C8			
AD-C41	in ProfDevlp	PD-C9			
PD-C12	reworded	PD-C9			
PD-C13	reworded	PD-C10			
PD-C15	reworded	PD-C11			
PD-C16	reworded	PD-C12			
	new	PD-C13			
	new	PD-C14			
PD-CP1.2	reworded	PD-C15			
	new	PD-C16			
PD-P1	reworded	PD-P1			
PD-P3	reworded	PD-P2			
PD-CP1.1	reworded	PD-P3			
AD-C46	combine AD-C46, AD-P8	PD-P4			
AD-P8	combine AD-C46, AD-P8	PD-P4			
PD-P2	eliminated				

Organization Contact Information

Board of Certification, Inc. (BOC)

4223 S. 143rd Circle

Omaha, NE 68137-4505

Fax:

Telephone: 402-559-0091 402-561-0598

Email:

staff@bocatc.org

Website:

www.bocatc.org

Joint Review Committee - Athletic Trainers (JRC-AT) Until July 2006 Commission on Accreditation of Athletic Training Education (CAATE) After July 2006

5142 South Andes Street

Centennial, CO 80015

Telephone: 303-627-6229 303-632-5915

Fax:

dlcaruthers@comcast.net

Email:

atheducation@duq.edu

Website:

www.jrc-at.org Until July 2006

www.CAATE.net After July 2006

National Athletic Trainers' Association (NATA)

2952 Stemmons Freeway

Dallas, TX 75247-6196

Telephone: 800-879-6282 214-637-2206

Fax: Email:

webdude@nata.org

Website:

www.nata.org

National Athletic Trainers' Association Education Council (NATA-EC)

276 SFH

Brigham Young University

Provo, UT 84602

Telephone: 801-422-3181

Fax:

801-422-0555

Email:

nataec(a byu.edu

Website:

www.nataec.org

Appendix C Course Description for All Courses

KINS 2010. Introduction to Kinesiology.

A survey of the foundations of kinesiology, the study of movement. Units include curricular, historical, philosophical, sociological, psychological, physiological, biomechanical, pedagogical, and motor behavioral components. Students will be introduced to the skills and knowledge required to become a successful practitioner, researcher, or teacher in careers related to kinesiology.

KINS 2100. Prevention and Care of Athletic Injuries.

Modern principles in the prevention, care, treatment, rehabilitation, and management of athletic related injuries and illnesses.

KINS 2100L. Prevention and Care of Athletic Injuries Laboratory.

Application of a variety of protective devices as well as taping, wrapping, and padding procedures consistent with the principles for the care and prevention of athletic injuries.

KINS 2470. Practicum in Athletic Training.

The student will gain entry-level knowledge and skills to function as a student athletic trainer. Each student will gain a minimum of 50 hours of clinical observation in an athletic training setting to obtain clinical experience.

KINS 3100. Recognition and Evaluation of Athletic Injuries I.

Methods and techniques in the recognition and evaluation of athletic injuries to the upper body.

KINS 3200. Recognition and Evaluation of Athletic Injuries II.

Methods and techniques in the recognition and evaluation of athletic injuries to the lower body.

KINS 3240. General Medical Conditions in Athletic Training.

Recognition and treatment of general medical conditions and disabilities of athletes and others involved in physical activity. Application of pharmacological principles in the treatment of illness, injury, and disease for an athletic population.

KINS 3750. Motor Skill Behavior.

Motor development and acquisition of motor skill behavior from birth to advanced age. Combines knowledge of motor development and motor learning in development of efficient teaching methods and strategies.

KINS 3910. Clinical Experience in Athletic Training I.

Medical knowledge and clinical skills related to the practice of athletic training with a focus on general trauma, injury prevention, taping, and bracing.

KINS 3920. Clinical Experience in Athletic Training II.

Medical knowledge and clinical skills related to the practice of athletic training with a focus on lower extremity pathology, general medical conditions, and pharmacological practices in athletic

training.

KINS 4100. Therapeutics I in Athletic Training.

Concepts and principles related to therapeutic modalities and rehabilitation used in the treatment of athletic injuries.

KINS 4110. Therapeutics II in Athletic Training.

Application of rehabilitation and therapeutic modality techniques for specific injuries to the spine, upper extremity, and lower extremity.

KINS 4120. Administration of Sports Medicine.

Advanced organization and administration principles in athletic training and sports medicine. Emphasizes the objectives, principles, and problems in the management of a comprehensive sports medicine program.

KINS 4130. Athletic Training Emergency Care.

The basic principles of emergency medical care focused on athletic injuries. This is a comprehensive course for the athletic trainer who must initially evaluate and stabilize an athlete in a trauma situation. Using a lecture format, rapid assessment, resuscitation, packaging, and transportation of the injured athlete are taught.

KINS 4200/6200. Biomechanics.

Application of mechanical principles to questions regarding mechanisms underlying the structure and function of human body, human movement effectiveness, equipment design, and injury mechanisms.

KINS 4300/6300. Exercise Epidemiology.

Health-related aspects of exercise, physical activity, and physical fitness from the perspective of epidemiology. Biological mechanisms for healthy adaptations to physical activity and the behavioral determinants of exercise participation.

KINS 4630/6630. Exercise Physiology I.

Physiological effects of human physical activity. Neuromuscular, cardiovascular, respiratory, metabolic, hormonal, and thermal responses and adaptations to exercise.

KINS 4640-4640L. Scientific Principles of Conditioning and Fitness.

Designing and implementing individualized exercise prescriptions for athletic conditioning or physical fitness development. Development of skills required in conducting physical fitness tests for aerobic power, body composition, flexibility, and muscular strength and endurance.

KINS 4910. Clinical Experience in Athletic Training III.

Medical knowledge and clinical skills related to the practice of athletic training with a focus on upper extremity pathology and emergency care of athletic injuries.

KINS 4920. Clinical Experience in Athletic Training IV.

Medical knowledge and clinical skills related to the practice of athletic training with a focus on therapeutic techniques.

FDNS 2100. Human Nutrition and Food.

Nutritional needs and food choices for the optimal health of the individual during the life cycle.