

**CAREER AND LIFE SKILLS EDUCATION
RENTON SCHOOL DISTRICT #403**

Renton, Washington



HEALTH SCIENCE/SPORTS MEDICINE 1-4
Curriculum Guide

Approved by the Board: April 5, 2006

If you have special needs which require this document to be provided in an alternative format, please contact the school principal (or program director) or Kay Hermann, ADA/509 Compliance Coordinator, 425-204-2421, 300 S.W. 7th St., Renton, WA 98055-2307.

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RENTON SCHOOL DISTRICT #403
Renton, Washington

A Philosophy of Education for the Renton Public Schools

A basic function and duty of a free society is the education of its children, youth and adults.

It is the responsibility of the schools to provide each student with the opportunities necessary to develop the scholarship, skills and attitudes which will enable the student to achieve mental, physical, emotional and social maturity.

Further, each student should, as a result of the school experience, be able to make decisions and to accept responsibility for those decisions.

POLICY: 6001
ADOPTED: February 3, 1977
Renton School District No. 403
Renton, Washington

Renton School District #403 recognizes the need for every graduate to have acquired job entry skills or at least to possess a level of knowledge and skills permitting continued training after high school.

Renton, Washington

*General Instructional Goals
Policy 6010*

The Renton School District fosters an educational process which helps all students achieve at their highest potential.

The Renton School District:

LEARNING

- Offers a curriculum which prepares our students for the future.
- Emphasizes that diversity contributes positively to the individual and to the community.
- Provides learning experiences matched to the needs, interests, and abilities of our diverse student population.
- Extends learning opportunities beyond the school.

INSTRUCTION

- Offers a variety of high quality instructional resources and services to students, staff, and community.
- Supports multiple instructional strategies.
- Provides resources and opportunities for continuing professional development of our staff.
- Conducts ongoing evaluations of our instructional programs.
- Maintains safe and inviting facilities that are conducive to learning.

COMMUNITY

- Creates partnerships which involve students, parents, staff and other community members and organizations.
- Promotes effective communication.
- Values and encourages development of a spirit of community service.
- Respects the rights and responsibilities of all.

As a result of the educational process in Renton, students will understand and apply:

Language skills including reading, writing and communication, with opportunities to learn world languages.

Mathematics skills including concepts, procedures, problem solving, reasoning, and mathematical language.

Science Skills including concepts, principles, and the scientific process.

Social studies skills, concepts, and processes - emphasizing history, geography, economics, international perspectives, multiculturalism, and participatory democracy.

Arts and humanities skills, concepts, and processes to create, perform, and solve problems and respond effectively.

Health and physical education skills, concepts, and processes to promote lifelong physical, mental and social well being.

In order to strengthen the above curricular areas, Renton students will understand and apply:

Thinking skills including the ability to - gather and analyze information, think logically, critically and creatively, integrate experience and knowledge in making reasoned judgments, and solve problems.

Career and life skills necessary for successful and responsible participation in family, work and community.

Technological skills to support learning, problem solving, and communication.

Skills necessary to be a lifelong learner and a contributor to the general welfare and the quality of life for all.

EVALUATION: The Renton School District regularly reviews, evaluates and modifies these General Instructional Goals to meet the changing needs of students, staff and community.

CAREER AND LIFE SKILLS EDUCATION
RENTON SCHOOL DISTRICT #403
Renton, Washington

Program Goals

GOAL 1: PROVIDE HIGH QUALITY CAREER AND LIFE SKILLS EDUCATION PROGRAMS AND SERVICE

Objectives:

- A. Assure that students completing Career and Life Skills Education programs have technical and behavioral competencies and basic skills sufficient to succeed in the workplace or higher education.
- B. Establish course and/or program transferability and articulation processes among K-12, community and technical colleges, private schools, colleges and universities, industry, apprentice-related training, and military training.
- C. Establish and regularly review standards for all Career and Life Skills Education programs.
- D. Evaluate Career and Life Skills programs based on standards, objectives, placements, job performance, costs, and community/industry acceptance.
- E. Utilize global, national, state, regional, and local data and advisory committee recommendations to identify appropriate curriculum and course offerings, program standards which meet the need of families, communities, business and industry.
- F. Provide facilities, equipment and instructional programs which meet the needs of a changing workplace.
- G. Revise or discontinue these programs that no longer meet the needs of students, business, labor, industry, and/or the community.
- H. Provide qualified instructors and administrators for Career and Life Skills Education based on relevant certification standards.
- I. Develop and utilize competency-based curricula for Career and Life Skills Education programs.

GOAL 2: CONTRIBUTE TO THE ECONOMIC DEVELOPMENT OF THE STATE

Objectives:

- A. Facilitate cooperation between public and private sector entities.
- B. Establish new Career and Life Skills programs based on existing and projected employment needs/demands and entrepreneurial opportunities.
- C. Work cooperatively with the public and private sectors, economic development organizations, labor, and educational institutions to provide creative, targeted programs that meet the needs of youth in economically depressed areas.
- D. Provide family life education programs which serve to strengthen families and contribute to the effectiveness of workers in managing their consumer and family roles and in their careers.
- E. Strengthen management skills for those seeking employment in worker owned and managed businesses.
- F. Create a stronger working partnership with Team Washington and other economic agencies and the associate development organizations.

GOAL 3: ASSURE ALL INDIVIDUALS EQUAL ACCESS TO CAREER AND LIFE SKILLS EDUCATION PROGRAMS, SERVICES, AND ACTIVITIES

Objectives:

- A. Provide Career and Life Skills programs, services, and activities that are free from racial, socio-economic, age, ethnic or sex bias, discrimination or stereotyping.
- B. Provide access to barrier-free Career and Life Skills Education programs.
- C. Actively recruit under-represented groups to all aspects of Career and Life Skills Education.
- D. Provide supportive services which promote entrance and success in Career and Life Skills programs.

GOAL 4: PROVIDE/UTILIZE AN INTEGRATED STATE PLANNING PROCESS

Objectives:

- A. Involve business, industry, agriculture, labor and other governmental and educational agencies in the planning processes at the state and local levels to ensure that establishment of delivery objectives and budget priorities.

- B. Identify instructional area/programs based on demand, placements, training needs, program costs, and follow-up.
- C. Utilize local, regional, state, national and global employment data, trends and advisory committees/organizations in identifying program offerings.

GOAL 5: PROVIDE AND MARKET CAREER AND LIFE SKILLS EDUCATION

Objectives:

- A. Increase public awareness, understanding, and acceptance of Career and Life Skills Education.
- B. Actively involve students, parents, community leaders, legislators, labor representatives, business organizations, industry, representatives, and other decision-makers from state and local arenas in Career and Life Skills Education program events and issues.

GOAL 6: PROVIDE INDIVIDUALS WITH CAREER DEVELOPMENT PROGRAMS AND EXPERIENCES

Objectives:

- A. Provide career orientation, exploration, occupational information, self-appraisal, and educational planning.
- B. Provide instruction in job search, job retention and job change skills and further education pursuits.
- C. Assure that Career and Life Skills Education programs encompass demands of today's workplace and include attitudinal, employability, leadership, basic interpersonal, and job specific skills.

GOAL 7: ASSURE A QUALITY STAFF DEVELOPMENT PROGRAM

Objectives:

- A. Provide appropriate channels for advisory committee recommendations in the program and policy-making process.
- B. Provide in-service training opportunities for local advisory committee members.
- C. Provide in-service training for administrators and Career and Life Skills instructors regarding the effective use of advisory committees.

CAREER AND LIFE SKILLS EDUCATION

RENTON SCHOOL DISTRICT #403

Renton, Washington

Program Description

Renton School District #403 operates a comprehensive Career and Life Skills Education Program through its three comprehensive high schools and two alternative programs. The district also participate a countywide Tech Prep consortium with local community, technical colleges as well as universities. This partnership allows students to earn college credit while still enrolled in high school programs. Secondary and post-secondary curricula are coordinated and students master and achieve skills, concepts, and technical competencies in high school that articulate with college programs. Students earn credit towards high school graduation and college technical programs at their home high schools.

The focus has changed in recent years from an emphasis on only job preparation to one of career exploration and support of core academic skill development. While skill development and employment readiness is still a primary goal, emphasis has been placed on career exploration, career pathway preparation, and post-secondary articulation.

The **Family and Consumer Science Education Program** is offered at Hazen, Lindbergh, Renton, Black River High Schools, and Sartori Education Center. The program is comprised of the following: American Sign Language 1-6; Careers in Education; Child Development; Culinary Arts 1-4; Design; Health; Independent Living; Leadership in Family and Employment (L.I.F.E. 101); Parenting, and Personal Fitness. School district and community sites provide applied work-based learning opportunities for program students.

The **Business Education Program** is offered in the District's three comprehensive high schools and two alternative high school sites. The program consists of technical business related classes sequentially arranged into a course of instruction leading to a Certificate of Proficiency or Mastery to facilitate job placement or post secondary articulation. Industry and professional certifications are also a goal for participating students. These courses are as follows: Accounting 1-4; Business Communications; Business Law; Business Management; Computer Program Design 1-2; Electronic Math Applications; Introduction to Information Technology; Information Technology 1-2; Information Technology-MultiMedia; Information Technology-Project Management; Principles of Business; Recordkeeping; Web Site Development 1; and Yearbook. Several of the programs are often arranged and blocked with language arts programs to support program integration and technology use in the writing process.

A comprehensive **Work-based/Work-site Learning Program** is offered in all of the facilities in the Renton School District. This program couples on-the-job experience and related classroom training to prepare students for employment during and beyond high

school. The **Marketing Education Program** which offers Introduction to Marketing 1-2, Advanced Marketing 1-2, Marketing Education Seminar 1-2, and **Career Choices Programs** provide students the opportunity to combine related classroom instruction and paid work experience to earn high school credit. These programs assist and support students as they make the transition from school to work. **Volunteer experiences, Internships, Job Shadows,** and **Service Learning** are also strong components of this community based applied experiences.

The community also plays a vital role in other programs offered through the Renton School District. The **Health Science/Sports Medicine Program** is reliant on clinical training stations and coordinated work experiences for students through local health and physical therapy facilities and community hospitals. This program is offered to all students in the Renton School District but operates only at Hazen High School and Sartori Education Center.

Technology Education Programs are offered at all three comprehensive high school facilities, and the Sartori Education Center. These programs are often integrated with the Science and Math departments to support applied learning and the development of technical skills and competencies for all students. Courses in this department are: Automotive Service Technician 1-2; Building Maintenance Technology 1-2; Computer Aided Design and Drafting 1-6; Computer Graphics 1-8; Construction and Manufacturing Technology 1-6; Networking Technology 1-4; Jewelry Manufacturing 1-2; Light Duty Mechanics and Related Careers 1-2; Power Mechanics 1-2; Principles of Technology/Robotics 3-4; and Video Production 1-8.

Integrated instruction has been the focus of the Career and Life Skills Education instructional team for a number of years and the results can be seen throughout the program in each of the secondary schools. Several programs have been launched and are operating very successfully in all of the secondary sites. While these programs qualify for career and technical education funding, the District has made the commitment to operate them collaboratively with a related academic instructor. These **Applied Career and Technical Education Approved Programs** are titled: Applied Communications; Applied Mathematics; Material Science Technology 1-2; and Principles of Technology 1-2.

Renton School District has made a commitment to provide career and technical education instruction and job preparation opportunities for Special Needs students in addition to mainstreaming them, when appropriate. In order to have enough students to support several offerings, the district has entered into interdistrict cooperative agreements with surrounding school districts to accept students on a space available basis. There are three such **special programs**: **Building Maintenance** operates at the Sartori Education Center; the **Career Ladders/Community Classroom** is offered at Valley Medical Center; and the **Horticulture/Landscape Design 1-2 Program** is operated at Black River High School.

Rev 02/07/05

CAREER AND LIFE SKILLS EDUCATION
RENTON SCHOOL DISTRICT #403
Renton, Washington

Mission Statement

The mission of Career and Life Skills Education in the Renton School District #403 is to prepare all learners for successful roles in families, careers and communities.

THREE BELIEFS

A. Beliefs about individual needs

1. All learners have unique gifts and talents and can be successful.
2. All learners must develop self-esteem and personal confidence for productive roles in society.
3. All learners need to have and attain personal and career goals, arising from a lifespan approach to personal growth and career development.

B. Beliefs about society's expectations

1. All learners must be prepared to become ethical, responsible and contributing world citizens.
2. All learners must adapt to change and participate in lifelong learning.
3. All learners must prepare for family roles and to balance work and family responsibilities.
4. All learners must develop essential creative/critical thinking, problem solving and communication skills.
5. All learners must value and have an appreciation for diversity in their schools, communities and workplaces.
6. All learners must recognize the impact of productive work on our economy.

C. Beliefs about systems that care for and support learners

1. All learners must have equitable access to a quality education.
2. All learners deserve to participate in learning systems where programs are mutually reinforcing and interdependent and where learning is related to life applications.
3. All learners must discover that school is part of a broader set of community resources they must access for learning and for achieving success in life.
4. All school programs must be developed in cooperative with family, business, labor and community representatives.
5. All staff must be accountable to ensure that all learners have the opportunity to establish and reach their goals.

Health Science/Sports Medicine 1-4
Washington State Essential Academic Learning Requirements

Health Science/Sports Medicine Year 1 This Career & Life Skills program supports the Washington State Essential Academic Learning Requirements. COURSE OBJECTIVES:	ART	CIVICS	COMMUNICATIONS	ECONOMICS	HEALTH & FITNESS	MATHEMATICS	READING	SCIENCE	SOCIAL STUDIES SKILLS	WRITING
Unit 1: Introduction to Health Sciences	X	X	X				X	X		X
Unit 2: Infectious Diseases			X		X		X			
Unit 3: Basic Medical Terminology and Documentation			X				X			X
Unit 4: Emergency Situations and Injury Assessment			X		X		X			X
Unit 5: Environmental Factors			X		X		X			
Unit 6: Recognizing Different Sports Injuries			X				X			
Unit 7: The Neck, Head and Face			X				X	X	X	X
Unit 8: The Foot, Ankle and Lower Leg	X		X		X	X	X	X	X	X
Unit 9: The Knee and Related Structures			X		X	X	X	X	X	X
Unit 10: The Thigh, Hip, Groin and Pelvis			X		X	X	X	X	X	X
Unit 11: The Elbow, Forearm, Wrist and Hand	X		X		X	X	X	X	X	X
Unit 12: The Shoulder Complex			X		X	X	X	X	X	X
Unit 13: The Torso			X				X	X	X	X
Health Science/Sports Medicine Year 2										
Unit 1: Sports Medicine Management	X	X	X	X			X	X		X
Unit 2: Infectious Diseases			X		X		X			
Unit 3: Applied Medical Documentation			X				X			X
Unit 4: Emergency Situations and Injury Assessment			X		X		X			X
Unit 5: The Neck, Head and Face			X				X	X	X	X
Unit 6: Psychological Aspects of Sports Injury			X				X			
Unit 7: Preventing Injuries Through Fitness Training			X		X		X			X
Unit 8: Injury Rehabilitation			X		X		X			X
Unit 9: The Foot, Ankle and Lower Leg	X		X		X	X	X	X	X	X
Unit 10: The Knee and Related Structures			X		X	X	X	X	X	X
Unit 11: The Thigh, Hip, Groin and Pelvis			X		X	X	X	X	X	X
Unit 12: The Elbow, Forearm, Wrist and Hand	X		X		X	X	X	X	X	X
Unit 13: The Shoulder Complex			X		X	X	X	X	X	X
Unit 14: Professional Preparation	X		X				X			X
Unit 15: Additional Health Concerns			X		X		X			
Unit 16: Special Populations			X		X		X			

HEALTH SCIENCE/SPORTS MEDICINE 1-4

History

In the fall of 1998 the staff and administration at Hazen High School surveyed the student body to explore interest relative to new course and program offerings at the school. The survey highlighted career areas and related programs that offered a variety of employment opportunities for high school graduates and options for articulation to post secondary institutions.

Of all of the programs and career fields identified, Sports Medicine and Health and Fitness related areas yielded the highest interest by the students at the high school. This reaction to the student interest survey was the impetus for program development and implementation. However, the project was supported by the data (needs assessment and employment forecast) published in the Occupational Outlook Handbook and by the Washington Occupational Information System (WOIS) regarding new and emerging occupations.

A program advisory committee was developed in the spring of 1999 to participate in an occupational analysis, which culminated in the development of a program pilot application and a course curriculum. The instructor was hired in August of 1999 and the program was implemented in the fall. Students attend the program one period each day for two semesters and participate in a practicum experience, which supports the high school athletic program and provides treatment for student athletes. The program instructor is a vocationally certified professional with an endorsement in Sports Medicine and a certification in Athletic Training.

The Sports Medicine program offers students an introduction to the Health Sciences fields related to the care of active individuals. Students learn the key components to an effective athletic health care system. These include techniques for recognizing specific injuries and conditions; treating sport-related injuries, referring patients to other caregivers; as well as documenting and tracking injuries. Also taught are prevention and rehabilitation techniques such as strength training and balance; which are incorporated in all aspects of post injury care. In an after school, hands-on-setting, students practice what they are learning in class by working with athletes who are at different stages of recovery from various injuries. This includes learning procedures for taping, wrapping and rehabilitating in order to return them to participation. Certification in first aid, CPR and AED are also offered as part of the program.

HEALTH SCIENCE/SPORTS MEDICINE 1-4

Program Goals

Renton School District students in the Health Science/Sports Medicine Program will:

- Develop an appreciation for the Health and Human Services field by exploring and participating in a variety of vocational activities and experiences
- Explore occupations and careers in areas related to Health Sciences
- Explore a variety of career and educational pathways which include post high school articulation
- Demonstrate the ability to conduct injury assessment and determine proper actions during an emergency situations
- Demonstrate the proper use of “Universal Precautions”
- Demonstrate an understanding of gross anatomy
- Provide an opportunity for students to develop skills in time management, team work, self-direction, and self-evaluation
- Build students’ self-confidence and positive attitude through success in a series of increasingly challenging experiences
- Provide educational experiences at a college preparatory level
- Allow students to experience a variety of assessment processes to prepare them for the style of various professional certification exams

HEALTH SCIENCE/SPORTS MEDICINE 1-4

Program Scope and Sequence

Year 1

- I. Introduction to Health Sciences
 - A. Understand what the field of Health Sciences encompasses
 - Compare and contrast the fields of study related to healthcare
 - Identify areas of specialization as it relates to sports medicine
 - Explore the roles of the sports medicine team within the greater healthcare system
 - Discuss employment settings for healthcare professions
 - Define the roles and responsibilities of various healthcare professions
 - B. Organization and Administration.
 - Plan a athletic healthcare facility
 - Establish rules of operation
 - C. Legal Liability.
 - Explain legal considerations of healthcare professionals
 - Define legal concepts

- II. Infectious Diseases
 - A. Types of bloodborne pathogens
 - Define HBV and HIV
 - Describe transmission routes
 - Give examples of signs and symptoms
 - B. Types of airborne pathogens
 - Describe transmission routes
 - Give examples of signs and symptoms
 - C. Universal Precautions
 - Preparing the athlete
 - Protecting yourself

- III. Basic-Medical Terminology and Documentation
 - A. Use of terms related to the medical field
 - Define anatomical terms
 - Define motion terms
 - Demonstrate report writing styles

- IV. Emergency Situations and Injury Assessment
 - A. Injury Assessment
 - Performance of Primary Survey
 - Performance of Secondary Assessment
 - Differentiate on/off field assessment
 - Apply procedures of documentation
 - B. Initial Care

- Demonstrate CPR guidelines
 - Apply R.I.C.E.S. principle
 - Demonstrate splinting techniques
 - Moving and Transportation of injured athletes
 - Demonstrate wound care techniques
- V. Environmental Factors
- A. Environmental Injuries
- Define Hyperthermia, hypothermia, sun exposure and electrical storms
 - Explain the five factors that affect body temperature
 - Define Heat and Cold illnesses/injuries
- B. Prevention of Environmental Injuries
- Explain how to prevent environmental emergencies
- VI. Recognizing Different Sports Injuries
- A. Acute Sports Injuries
- Describe various fractures
 - Differentiate dislocations/subluxations
 - Identify sprains vs. strains
- B. Chronic Sports Injuries
- Compare tendonitis and other chronic muscle injuries
 - Explain what bursitis is
- C. Healing Process
- Explain importance of inflammation
 - Identify stages of healing
- D. Medical Impacts on Fitness
- Identify common medical conditions in athletes
- VII. The Neck, Head and Face
- A. Anatomy
- Discuss the anatomy of the head and face
 - Discuss the cervical vertebrae of the spine
- B. Spinal Injury Assessment
- Explain ways of preventing spinal injuries
 - List the steps of assessment of the spine
 - State the cause, signs, and care of cervical injuries
- C. Head Injury Assessment
- Discuss head injuries
 - Demonstrate the steps of assessment of the head
 - Explain how to evaluate for concussion
 - State the cause, signs and care of head and face injuries
- VIII. The Foot, Ankle and Lower Leg
- A. Anatomy
- Identify the bones of the foot, ankle and lower leg
 - Identify the ligaments of the foot, ankle and lower leg
 - Identify the muscles of the foot, ankle and lower leg

- Identify the arches of the foot
- B. Injury Assessment
- Explain injury prevention techniques
 - Demonstrate the steps of ankle and lower leg assessment
 - State the cause, signs and are of injuries to the foot, ankle and lower leg
- C. Care of Ankle Injuries
- Describe immobilization procedures
 - Demonstrate appropriate taping / wrapping procedures
 - Demonstrate proper heel cord stretching
- IX. The Knee and Related Structures
- A. Anatomy
- Identify the bones of the knee
 - Identify the ligaments of the knee
 - Identify the muscles of the knee
- B. Injury Assessment
- Explain injury prevention techniques
 - Demonstrate the steps of knee assessment
 - State the cause, signs and care of injuries to the knee
- C. Care of Knee Injuries
- Describe immobilization procedures
 - Demonstrate appropriate taping / wrapping procedures
- X. The Thigh, Hip, Groin and Pelvis
- A. Anatomy
- Identify the bones of the thigh, hip, groin, and pelvis
 - Identify the muscles of the thigh, hip, groin, and pelvis
 - Identify the joints of the hip and pelvis
- B. Injury Assessment
- Explain injury prevention techniques
 - Demonstrate the steps of upper leg assessment
 - State the cause, signs and care of injuries to the thigh, hip, groin, and pelvis
- C. Care of Thigh & Hip Injuries
- Describe immobilization procedures
 - Demonstrate appropriate taping / wrapping procedures
 - Demonstrate proper hip stretching
- XI. The Elbow, Forearm Wrist and Hand
- A. Anatomy
- Identify the bones of the elbow, forearm wrist and hand
 - Identify the ligaments in the upper limb
 - Identify the muscles of the upper limb
 - Identify the joints of the elbow, forearm wrist and hand
- B. Injury Assessment
- Explain injury prevention techniques

- Demonstrate the steps of elbow assessment
- State the cause, signs and care of injuries to the shoulder complex

C. Care of Elbow, Forearm Wrist and Hand Injuries

- Describe immobilization procedures
- Demonstrate appropriate taping / wrapping procedures

XII. The Shoulder Complex

A. Anatomy

- Identify the bones that make up the shoulder complex
- Identify the ligaments of the shoulder
- Identify the muscles of the shoulder complex
- Identify the joints in the shoulder

B. Injury Assessment

- Explain ways of preventing shoulder injuries
- Demonstrate the steps of shoulder assessment
- State the cause, signs and care of injuries to the shoulder complex

C. Care of Shoulder Complex Injuries

- Describe immobilization procedures
- Demonstrate appropriate taping / wrapping procedures

XIII. The Torso

A. Anatomy

- Discuss the bony anatomy of the thorax and abdomen
- Differentiate the thoracic and lumbar vertebrae of the spine
- List the muscles of the spine, thorax and abdomen
- Identify Intervertebral articulations and discs
- Identify the major ligaments of the spine
- List the organs contained within the thorax and abdomen

B. Injury Assessment

- Explain ways of preventing torso injuries
- List the steps of assessments of the torso
- State the cause, signs and care of torso injuries

Year 2

I. Sports Medicine Management

A. Understand what the Health Science area of Sports Medicine encompasses

- Compare and contrast the fields of study related to sports medicine
- Identify areas of specialization within sports medicine
- Explore the roles of the sports medicine team
- Discuss employment settings for sports medicine professions
- Define the roles and responsibilities of various sports medicine professions

B. Organization and Administration.

- Evaluate athletic healthcare facilities

- Develop a budget
- C. Legal Liability.
- Explain legal considerations of sports medicine professionals
 - Define legal concepts
 - Discuss insurance considerations for both the athlete and the athletic trainer
- D. Professional Preparation.
- Create a resume
 - Identify plan for portfolio
- II. Infectious Diseases (annual refresher as required for medical professionals)
- A. Types of bloodborne pathogens
- Define HBV and HIV
 - Describe transmission routes
 - Give examples of signs and symptoms
- B. Types of airborne pathogens
- Describe transmission routes
 - Give examples of signs and symptoms
- C. Universal Precautions
- Preparing the athlete
 - Protecting yourself
- III. Applied Medical Documentation
- A. Use of terms related to the medical field
- Demonstrate anatomical terms
 - Demonstrate motion terms
 - Instruct and evaluate report writing styles
- IV. Emergency Situations and Injury Assessment
- A. Emergency Planning
- Prearrange an emergency plan
- B. Injury Assessment
- Perform and evaluate Primary Survey
 - Perform and evaluate Secondary Assessment
 - Differentiate on/off field assessment
 - Apply procedures of documentation
- C. Initial Care
- Demonstrate CPR and AED guidelines
 - Apply R.I.C.E.S. principle
 - Demonstrate splinting techniques
 - Moving and Transportation of injured athletes
 - Demonstrate wound care techniques
 - Demonstrate use of epi-pen & inhalers per AHA guidelines
- V. The Neck, Head and Face

- A. Anatomy
 - Discuss the anatomy of the head and face
 - Discuss the cervical vertebrae of the spine
 - B. Spinal Injury Assessment
 - Explain ways of preventing spinal injuries
 - Explain the steps of assessment of the spine
 - State the cause, signs, and care of cervical injuries
 - C. Head Injury Assessment
 - Discuss head injuries
 - Demonstrate and evaluate the steps of assessment of the head and face
 - Explain how to evaluate for concussion
 - State the cause, signs and care of head and face injuries
- VI. Sport Psychology
- A. Psychological Stressor
 - Explain how sports are stressors
 - Define stress responses
 - Describe psychological reactions to injury (loss)
 - List the at risk profile
 - B. Performance Effects
 - Describe personality types that are more prone to injury
 - Define overtraining and staleness
 - Identify positive reactions to athletes
 - Explain how to help an athlete be emotionally ready to reenter sports
- VII. Preventing Injuries Through Fitness Training
- A. Principles of Conditioning
 - Define conditioning seasons
 - Identify the foundations of conditioning
 - B. Conditioning Techniques
 - Explain the importance of Flexibility
 - Summarize the importance of muscular strength, endurance and power
 - Describe the techniques of resistance training, circuit training, plyometric exercise and Calisthenic exercise.
 - Identify the importance of cardiorespiratory endurance.
 - Explain the concept of Core Stability
 - Develop an off-season conditioning program
- VIII. Injury Rehabilitation
- A. Stages of Rehabilitation
 - List the goals of each stage of rehabilitation
 - Identify progression requirements
 - Identify return-to-play considerations
 - B. Rehabilitation Skills
 - Demonstrate basic training room modalities
 - Identify other forms of therapeutic modalities

- C. Rehabilitation Planning
 - Identify rehabilitation progression
 - Demonstrate rehabilitation design
 - List factors effecting rehabilitation adherence

- IX. The Foot, Ankle and Lower Leg
 - A. Anatomy Review
 - Identify the bones of the foot, ankle and lower leg
 - Identify the ligaments and muscular structures of the foot, ankle and lower leg
 - Identify the arches of the foot
 - B. Injury Assessment
 - Explain injury prevention techniques
 - Demonstrate and evaluate the steps of ankle and lower leg assessment
 - Explain the cause, signs and are of injuries to the foot, ankle and lower leg
 - C. Care of Ankle Injuries
 - Demonstrate immobilization procedures
 - Evaluate appropriate taping / wrapping procedures
 - Develop and demonstrate ankle rehabilitation plan

- X. The Knee and Related Structures
 - A. Anatomy Review
 - Identify the bones of the knee
 - Identify the ligaments and muscular structures of the knee
 - B. Injury Assessment
 - Explain injury prevention techniques
 - Demonstrate and evaluate the steps of knee assessment
 - State the cause, signs and care of injuries to the knee
 - C. Care of Knee Injuries
 - Demonstrate immobilization procedures
 - Evaluate appropriate taping / wrapping procedures
 - Develop and demonstrate knee rehabilitation plan

- XI. The Thigh, Hip, Groin and Pelvis
 - A. Anatomy Review
 - Identify the bones of the thigh, hip, groin, and pelvis
 - Identify the ligaments and muscular structures of the thigh, hip, groin, and pelvis
 - Identify the joints of the hip and pelvis
 - B. Injury Assessment
 - Explain injury prevention techniques
 - Demonstrate and evaluate the steps of thigh and hip assessment
 - State the cause, signs and care of injuries to the thigh, hip, groin, and pelvis
 - C. Care of Thigh & Hip Injuries
 - Demonstrate immobilization procedures
 - Evaluate appropriate taping / wrapping procedures
 - Develop and demonstrate thigh or hip rehabilitation plan

XII. The Shoulder

A. Anatomy Review

- Identify the bones that make up the shoulder complex
- Identify the ligaments and muscular structures of the shoulder
- Identify the joints in the shoulder

B. Injury Assessment

- Explain ways of preventing shoulder injuries
- Demonstrate and evaluate the steps of shoulder assessment
- State the cause, signs and care of injuries to the shoulder complex

C. Care of Shoulder Injuries

- Demonstrate immobilization procedures
- Evaluate appropriate taping / wrapping procedures
- Develop and demonstrate shoulder rehabilitation plan

XIII. The Elbow, Forearm, Wrist and Hand

A. Anatomy Review

- Identify the bones of the elbow, forearm wrist and hand
- Identify the ligaments and muscular structures in the upper limb
- Identify the joints of the elbow, forearm wrist and hand

B. Injury Assessment

- Explain ways of preventing elbow injuries
- List the steps of elbow assessment
- State the cause, signs and care of injuries to the shoulder complex

C. Care of Elbow, Forearm, Wrist and Hand Injuries

- Demonstrate immobilization procedures
- Evaluate appropriate taping / wrapping procedures
- Develop and demonstrate elbow and wrist rehabilitation plan

XIV. Professional Preparation

A. Culminating Portfolio

- Update resume
- Demonstrate interview techniques
- Develop video-based portfolio of best work

XV. Additional Health Concerns

A. Sports Nutrition

- Identify how muscles create energy
- Give examples of nutrients which enhances performance
- Explain how nutrition can aid in injury prevention
- Describe pros and cons of nutrition supplements
- List the effects of hydration on performance

B. Body Composition

- Describe methods of weight loss/gain
- List signs of eating disorders

C. Substance Abuse

- Describe types of drug abuse in athletics
- Describe other substances abused in athletics

D. Female Athlete Concerns

- Explain concerns relating to sports

E. Other conditions that affect performance

- Explain the causes, preventions and care of common skin infections
- Describe respiratory tract illnesses common in athletics
- Identify disorders of the Gastrointestinal tract
- Explain various medical disorders

XVI. Special Populations

A. Competition of children in organized sports

- List physical maturity
- Describe effects of training
- Explain potential factors for injury
- Identify techniques of injury prevention

B. Participation of Older Adults in Exercise Programs

- List physical maturity
- Describe effects of training
- Explain potential factors for injury
- Identify techniques of injury prevention

C. Working with Individuals

- List legal considerations regarding ADA and title IX

HEALTH SCIENCE/SPORTS MEDICINE 1-4
Course Evaluation/Assessment

Evaluation of students in HealthScience/Sports Medicine class toward the attainment of the objectives listed in this guide will be measured in a variety of ways.

These include the following:

- Self Assessments
- Teacher made assessments
- Individual student portfolios
- Class participation and interaction
- Research papers and presentations
- Class presentations
- Role playing
- Class/Homework
- Skills demonstrations
- Slide show presentations
- State recognized first aid, CPR, AED & bloodborne pathogens knowledge & skills assessments

HEALTH SCIENCE/SPORTS MEDICINE 1-4
Course Instructional Materials

Text Books

Essentials of Athletic Training, Arnheim & Prentice
Essentials of Athletic Injury Management, Arnheim & Prentice

Lab & Supplemental Instructional Books

Human Anatomy Coloring Book, Kapit & Elson
First Aid / CPR / AED Participant Booklet, American Red Cross
Sport Safety Training Handbook and Workbook, American Red Cross
Preventing Disease Transmission, American Red Cross
Heartsaver First Aid, American Heart Association
Heartsaver CPR, American Heart Association
Heartsaver AED, American Heart Association
Trail Guide to the Body, Biel

Video Tapes (Including, but not limited to)

Athletic Training Series, Cramer Products Inc.
The Video Atlas of Human Anatomy, Acland
Body Atlas, Ambrose Video
Workplace Training: Standard First Aid Video, American Red Cross
Preventing Disease Transmission, American Red Cross
Sport Safety Training, American Red Cross
Heartsaver First Aid, American Heart Association
Heartsaver AED, American Heart Association
Management of Sports-Related Cervical Spine Injuries, King County Emergency Medical Services
Cervical Spine Injured Athlete Transfer Protocol, Northern Virginia Spine Institute
Prevent Paralysis: Don't Hit with your Head, Torg & Vermeil
Spinal Impact, TLC Video
EpiPen Epinephrine Auto-injector, Dey Pharmaceuticals
When Concussions Kill: Second Impact Syndrome
Body Invaders: Backache, Discovery Networks
Sports Science: Biomechanics, AIT
Alternatives Uncovered, Discovery Networks
Xtreme Martial Arts, Discovery Networks
Critical Condition, PBS
Sports Medicine III, University of Wisconsin

Patch Adams, Universal Studios
Gross Anatomy, Touchstone Pictures
Various arthroscopic surgery tapes

Software (Including, but not limited to)

Interactive Functional Anatomy, Primal Pictures
Interactive Skeleton: Sports & Kinetic Edition, Primal Pictures
Exercise and Rehabilitation Prescription Kit, Visual Health Information
ADAM Interactive Anatomy, ADAM Software, Inc.
ADAM Essentials, ADAM Software, Inc.
ADAM MediaPro, ADAM Software, Inc.

Recorded Television Programming (Including, but not limited to)

Impact, Discovery Networks: Discovery Health
The Critical Hour, Discovery Networks: Discovery Health

Reference Books (Including, but not limited to)

Physical Examination of the Spine & Extremities, Hoppenfeld
Orthopedic Physical Assessment, Magee
Evaluation of Orthopedic and Athletic Injuries, Starkey & Ryan
Athletic Injury Assessment, Booher & Thibodeau
Illustrated Essentials of Musculoskeletal Anatomy, Sieg & Adams
The Muscular System Manual Coloring Book, Muscolino
Pocket Atlas of Human Anatomy, Feneis
Color Atlas / Text of Human Anatomy: Volume 1, Kahle, Leonhardt & Platzer
Anatomy of the Living Human: Atlas of Medical Imaging, Csillag
Radiology of Trauma, Heller & Fink
Atlas of Medical Anatomy, Langman & Woerdeman
Gross Anatomy in the Practice of Medicine, Slaby, McCure & Summers
Strength Training Anatomy, Delavier
Women's Strength Training Anatomy, Delavier
Sports Medicine Handbook, NFHS
Sports Medicine Handbook, NCAA

Periodicals (Including, but not limited to)

JAT: Journal of Athletic Training
JEMS: Journal of Emergency Medical Services
NATA News
Training & Conditioning
Advance for Directors in Rehabilitation
Physician & Sports Medicine
Sports Science Exchange, Gatorade Sports Science Institute
Pro Football Health Science, Professional Football Health Sciences Society
PBATS Newsletter, Professional Baseball Health Sciences Society
The First Aider, Cramer Products Inc.
HPSO Risk Advisor, Healthcare Providers Service Organization

HEALTH SCIENCE/SPORTS MEDICINE 1-4

Course Leadership and Vocational Plan

LEADERSHIP AREAS	STUDENTS WILL:	VOCATIONAL ASPECTS	INTEGRATED INTO CURRICULUM
<p>Area 1: Introduction to Leadership Students will develop an understanding and demonstrate a knowledge for the purpose of Student Leadership in Vocational Education.</p>	<ul style="list-style-type: none"> • Discuss the purpose of developing personal and group leadership skills. • Determine the skills that will help me function in family, community and work settings. 		
<p>Area 2: Personal Qualities Students will demonstrate personal qualities necessary to function in a family, community and work setting.</p>	<ul style="list-style-type: none"> • Determine the importance of values and goals. • Identify short and long term goals. • Write down necessary steps to carry out goal. • Describe how personal values are reflected in work ethics. 	<ul style="list-style-type: none"> • Introduction to Sports Medicine. • What is Sports Medicine? 	
<p>Area 3: Interpersonal Skills Students will become aware of and demonstrate interpersonal skills needed to function in Sports Medicine.</p>	<ul style="list-style-type: none"> • Demonstrate how to work cooperatively with others. • Provide for positive role models in actions, behaviors & attitudes in a stressful situation. • Identify and write down goals for self. • Determine whether goals are conceivable, achievable, and can be measured. • Write down necessary steps to carry out each goal. Evaluate each step. • Manage and resolve positive stress and adversity in the Sports Medicine setting. 	<ul style="list-style-type: none"> • Guest Speaker from the Sports Medicine field 	
<p>Area 4: Communication Skills Students will be able to communicate effectively in the community and work situations.</p>	<ul style="list-style-type: none"> • Students will actively “listen” and carry out signed and oral instructions. • Will prepare formal and informal written materials. 	<ul style="list-style-type: none"> • Introduction to related fields: Nursing Medical 	<ul style="list-style-type: none"> • Assigned Research Project on Related Fields presented in class.
<p>Area 5: Community Students will develop an understanding</p>	<ul style="list-style-type: none"> • Recognize the values of the Sports Medicine and Athletic training field. 	<ul style="list-style-type: none"> • Participation in appropriate events offered by the Sports 	<ul style="list-style-type: none"> • Ongoing readings and Videotapes on Careers in Sports Medicine.

and demonstrate knowledge of how to work effectively in the community and in a work situation.		Medicine community in the Seattle area.	
Area 6: Personal and Tech Resources. Students will be able to utilize personal and technological resources to make decisions in the Sports Medicine workplace.	Research and identify the use of technological tools.		Videotape Articles on Sports Medicine
Area 7: Group Dynamics Students will demonstrate organizational skills in large and small group situations.	Understand team skills Develop group facilitation skills Conduct an effective small group meeting.		Class project assignment of expressive skit (students brainstorm, write and perform skit).
Area 8: Employability Skills Students will understand and demonstrate effective employability skills.	<ul style="list-style-type: none"> Identify behaviors to establish successful working relationships. Identify means of dealing with conflict resolution as an Health Science. Identify and demonstrate proper work ethics. 	<ul style="list-style-type: none"> Guest Speaker Certified Interpreter 	