



Board/Authority Authorized Course Framework Template

School District/Independent School Authority Name: Chilliwack School District	School District/Independent School Authority Number (e.g. SD43, Authority #432): SD #33
Developed by: Ken Larsen	Date Developed: February 20, 2019
School Name: G.W. Graham Secondary School	Principal's Name: Chuck Lawson
Superintendent Approval Date (for School Districts only):	Superintendent Signature (for School Districts only):
Board/Authority Approval Date:	Board/Authority Chair Signature:
Course Name: Sports Medicine	Grade Level of Course: 12
Number of Course Credits: 4	Number of Hours of Instruction: 120

Board/Authority Prerequisite(s):

Physical Education 10; Sports Medicine 11

Special Training, Facilities or Equipment Required:

Teacher(s) should have some training in the area of Kinesiology and Athletics, and be current on protocols for first aid, resuscitation and athletic taping. First aid training equipment (manikins, AED trainers and first aid supplies) and athletic taping supplies will be required.

Course Synopsis:

This course builds on material covered in Sports Medicine 11 and provides students with an opportunity to expand on their knowledge and experience with the various facets of sports injuries, first aid care, training room management, physical and mental performance, and professions related to sports medicine. Due to a variety of dimensions associated with sports medicine, the class will incorporate subject areas such as nutrition, sports psychology, anatomy, physiology, first aid, and prevention and rehabilitation of sports injuries. Instruction will utilize such processes as guided discovery, problem solving, independent research, practical labs and application of acquired skills for field simulations and situations.

Goals and Rationale:

- to provide students with an introduction to fields of Sports Medicine and Kinesiology
- to provide students with the opportunity to explore potential educational and occupational paths
- to provide students with both theoretical and practical experience in treating and managing injuries
- to provide students with a deeper understanding of the different aspects of physical and mental health

Aboriginal Worldviews and Perspectives:

This course emphasizes experiential learning and embodies the many of the First Peoples principals of learning:

- Learning ultimately supports the well-being of the self, the family, and the community.
- Learning is holistic, reflexive, reflective, experiential, and relational.
- Learning involves recognizing the consequences of one's actions.
- Learning requires the exploration of one's identity.

BIG IDEAS

<p>1) Safety and injury prevention practices allow lifelong participation in physical activities.</p>	<p>2) Understanding how our bodies move and function helps us maximize training and performance goals.</p>	<p>3) Personal choices influence our health and fitness goals</p>	<p>4) Giving back to the community is part of a healthy lifestyle</p>
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Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to do the following:</i></p> <p>Safety</p> <ul style="list-style-type: none"> • Demonstrate a primary assessment involving critical interventions for a broad range of life-threatening traumatic and medical emergencies • Demonstrate a secondary assessment involving history taking, assessing vitals and performing a head to toe check • Demonstrate cardiopulmonary resuscitation (CPR) and Automated External Defibrillation (AED) • Demonstrate assessment and treatment of sport specific injuries • Explain how proper technique and use of equipment reduces the chance of injury • Demonstrate the proper taping technique in the management of various injuries <p>Human Anatomy and Physiology</p> <ul style="list-style-type: none"> • Identify and describe how muscles produce movement in different parts of the body and how to train those muscles • Identify the bones of the skeletal system and describe their function • Identify and describe the influences of different training styles on fitness results • Identify the different energy systems employed by the body in particular styles of training <p>Health and Well-being</p>	<p><i>Students are expected to know the following:</i></p> <ul style="list-style-type: none"> • Basic first aid with CPR and AED • The symptoms and treatments of injuries, including nonlife-threatening, environmental, airway and breathing • Anatomical terminology • Muscular System: types of skeletal muscles, energy pathways, functions • Skeletal System: bone physiology, types of joints • Principles of program design for a sport-specific, periodized program • Ways to monitor and adjust physical exertion levels for maximizing results of training phases • Potential short- and long-term consequences of health decisions • Nutrition and meal planning • Sources of mental and physical health information • Different aspects of health and their impacts on athletics • Different careers paths within the field of sports medicine

- Demonstrate reasoned decision-making related to personal health and well-being
- Identify and analyze the relationships between lifestyle patterns and performance in fitness activities
- Explain how developing competencies in fitness and conditioning activities can increase confidence and encourage lifelong participation in physical activities
- Identify the role of proper nutrition in athletic performance and personal well-being
- Identify and apply strategies to pursue personal healthy-living goals
- Explain how **psychological skills training (PST)** can impact athletic performance and can improve everyday mental well-being

Big Ideas – Elaborations

1) Safety and injury prevention:

-including understanding and applying safety and injury prevention practices for self and others

2) Understanding:

-how body systems work and interact to enable movement, and the impacts physical training, psychological training and nutrition can have on movement

3) Person Choices:

-identify and employ particular nutrition, training and mental health strategies while understanding their possible impacts on health, fitness and Performance

4) Giving Back:

-taking on leadership roles within our athletics department, supporting athletes in treating and managing injuries

Curricular Competencies – Elaborations

Critical interventions = at this level, means focusing on initial life-saving patient management when you are less than 15 minutes away from medical aide (as opposed to a long-term care or patient transport)

Taping Techniques for Various Injuries = ankles, Achilles tendon, Plantar fasciitis, knees

Psychological Skills Training (PST) = refers to the systematic and consistent practice of mental or psychological skills for the purpose of enhancing performance (for example: maintaining focus and concentration, regulating arousal levels, enhancing confidence and maintaining motivation)

Content – Elaborations

- Basic first aid with CPR and AED
 - primary and secondary surveys
 - appropriate responses to nonlife-threatening emergencies: lacerations, abrasions, strains, sprains, fractures, dislocations, subluxations, dislocations, contusions, dental injuries, nose bleeds, eye injuries
 - appropriate responses to life-threatening emergencies: shock, anaphylaxis; obstructed airway, hypo/hyperthermia, use of CPR and an AED
- Anatomical terminology
 - relative positions on the body (anterior, posterior, dorsal, ventral, etc.), bone names, muscle names
- Muscular System:
 - types of skeletal muscle: Type I, Type IIa, Type IIb
 - Energy pathways: ATP/CP System, Aerobic System, and Anaerobic Glycolysis/Lactic Acid System
 - functions: origin, insertion, concentric contractions, eccentric contractions, isometric contractions, isotonic contractions

Content – Elaborations

- Skeletal System:
 - Types of joints: synovial, fibrous, cartilaginous
 - Bone physiology: compact versus spongy bone; production, breakdown and maintenance of bone
- Principles of program design for a sport-specific, periodized program
 - 5 phases of a periodized program: Anatomical Adaptation, Hypertrophy, Strength, Conversion to Power, Maintenance
- Ways to monitor and adjust physical exertion levels for maximizing results of training phases
 - adhering to the principles of FITT, SAID, overuse, diminishing returns
 - physical exertion scales, electronic devices
- Potential short- and long-term consequences of health decisions
 - relating to physical fitness, nutrition and mental health
- Nutrition and meal planning
 - understanding the roles basic nutrients play within our bodies
 - creating a personalized meal plan based on the Canada Food Guide to meet personal health and fitness needs
- Sources of mental and physical health information
 - identify reputable sources for health information
- Different aspects of health and their impacts on athletics as well as personal well-being
 - impacts of physical fitness on personal well-being
 - impacts of nutrition on personal well-being
 - impacts of mental health on personal well-being
- Different careers paths within the field of sports medicine
 - doctor, nurse, chiropractor, occupational therapist, physical therapist, massage therapist, paramedic, kinesiologist, personal trainer, nutritionist, etc.

Recommended Instructional Components:

- Direct instruction and demonstrations
- Guided practice and feedback
- Group work and peer teaching
- Project-based application of content
- Practical application of knowledge and skills through volunteer experiences
- Guest speakers

Recommended Assessment Components: Ensure alignment with the [Principles of Quality Assessment](#)

Formative assessment, guided by clear expectations, will be ongoing throughout the course and will include teacher, self and peer feedback.

Knowing and Understanding

Assignments and Projects	35%
Quizzes and Tests	35%

Understanding and Doing

Practical Skills Tests/Application	30%
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Learning Resources:

The following standard-setting agencies will be relied upon for up-to-date and accurate information and resources:

Canadian Red Cross

<http://www.redcross.ca/article.asp?id=000620&tid=021>

The Red Cross maintains most of their resources online because it is much easier to update than print resources. However, they publish a first aid manual creatively called the First Aid and CPR Manual that we would use as a resource. They also publish the best wilderness first aid resources, entitled Wilderness and Remote First Aid Manual.

Government of Canada – Canada Food Guide

<https://food-guide.canada.ca/en/>

Provides the most up-to-date nutritional information and recommendations for Canadians.

Anaphylaxis Canada

<http://www.anaphylaxis.ca/>

Anaphylaxis Canada provides the most in-depth information on allergic reactions and the use of auto-injectors. They provide free auto-injector trainers to First Aid Instructors.

Canadian Diabetes Association

<http://www.anaphylaxis.ca/>

Canadian Diabetes Association provides the most in-depth information on diabetes and the use of glucometers.

SportMed BC

<http://www.sportmedbc.com/safetyOverview.php>

SportMed BC offers a program on sports first aid and one specifically on taping. The print resources that we would refer to are the Sports First Aid Manual and the Sports Taping Manual.

BCRPA

http://www.bcrpa.bc.ca/fitness_program/overview.htm

The BCRPA is the standard-setting agency for Fitness Theory. They have three approved manuals for the course, all of which are good resources. We would most likely use this one:

Isachsen, S. & Dr. Bill Luke Canadian Online Fitness Education Inc., Fitness Theory Manual

Other Reference Material

Here is a list of books that are all recommended by Sport Med BC. We may use some information from these sources.

<http://www.sportmedbc.com/booksAll.php>

The BC government maintains an excellent online searchable database of health information. This is where students can find information for assignments, etc.

<http://www.healthlinkbc.ca/>