

# **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:	Date Developed:
Ken Larsen	February 20, 2019
School Name:	Principal's Name:
G.W. Graham Secondary School	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:	Grade Level of Course:
Sports Medicine	11
Number of Course Credits: 4	Number of Hours of Instruction: 120

## **Board/Authority Prerequisite(s):**

Physical Education 10

## **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 introduces students to 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.

Course Name: Sports Medicine Grade: 11

# **BIG IDEAS**

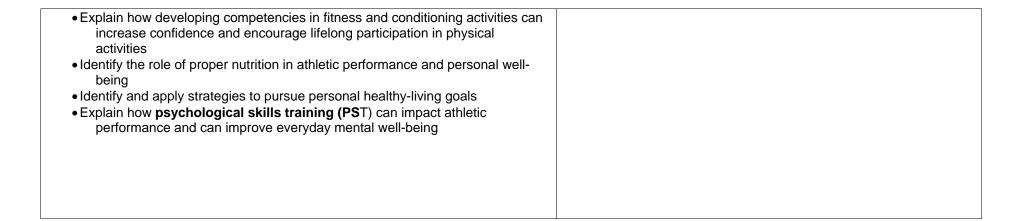
1) Safety and injury prevention practices allow lifelong participation in physical activities.

**2) Understanding** how our bodies move and function helps us maximize training and performance goals.

3) Personal choices influence our health and fitness goals

# **Learning Standards**

<b>Curricular Competencies</b>	Content
Students are expected to do the following:  Safety  • Demonstrate a primary assessment involving critical interventions for a broad	Students are expected to know the following:  • Basic first aid with CPR and AED • Anatomical terminology
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  Human Anatomy and Physiology  • 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 structures of the cardiorespiratory system and describe how they impact physical performance	<ul> <li>Muscular System: types and functions of muscles</li> </ul>



## **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 this movement

## 3) Person Choices:

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

# **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, fingers, wrists

**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 (medial, lateral, proximal, distal, etc.), bone names, muscle names
- Components of the Muscular System
  - types of muscles: cardiac, smooth, skeletal
  - -functions of muscles: prime mover, synergist, antagonist
- Skeletal System
  - functions of the skeletal system
  - -axial skeleton and appendicular skeleton

### **Content – Elaborations**

- Components of the Cardiovascular System
  - -components of the respiratory system and the circulatory system
  - -direction of blood flow throughout the body
  - -how the cardio respiratory system is impacted by exercise: aerobic, anaerobic
- Components of an exercise program
  - -warm-up, cardio, cool-down, strength, flexibility
- Principles of program design to enhance fitness and performance
  - -FITT principle, SAID principle, recovery and specificity
- Ways to monitor and adjust physical exertion levels
  - baseline information collecting, heart-rate monitoring, heart rate zones, percentage of one-repetition maximum, repetitions, sets, resistance
- Potential short- and long-term consequences of health decisions
  - -relating to physical fitness, nutrition and mental health
- Performance enhancing supplements and drugs
  - -proposed benefits and health risks of legal and illegal PESs and PEDs
- Basic aspects of Nutrition
  - -nutrients: fats, carbohydrates, proteins, water, vitamins, minerals
  - -reading and interpreting nutrition labels and the Canada Food Guide
- Mental health and how it pertains to athletics
  - -three phases of Psychological Skills Training
  - -practices that reduce negative mental states and improve performance
- Different careers paths within the field of sports medicine
  - -post-secondary programs that will lead into careers in sports medicine

## **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%

## **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 that 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-quide.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 <u>Sports First Aid Manual</u> and the <u>Sports Taping Manual</u>.

#### **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. <a href="http://www.sportmedbc.com/booksAll.php">http://www.sportmedbc.com/booksAll.php</a>

The BC government maintains an excellent online searchable database of health information. This is where students can find information for assignments, etc. <a href="http://www.healthlinkbc.ca/">http://www.healthlinkbc.ca/</a>