Board/Authority Authorized Course Framework Template

School District/Independent School Authority Name: Abbotsford School District	**School District/Independent School Authority Number (e.g. SD43, Authority #432):** SD34
Developed by: Soraya Rajabally, Ali Tessarolo	**Date Developed:** October 23, 2018
School Name: Yale Secondary School	**Principal's Name:** Jinder Sarowa
Superintendent Approval Date (for School Districts only): Dec. 5, 2018	**Superintendent Signature (for School Districts only):**
Board/Authority Approval Date: Nov. 6, 2018	**Board/Authority Chair Signature:**
Course Name: BAA Sports Medicine 11	**Grade Level of Course:** 11
Number of Course Credits: 4	**Number of Hours of Instruction:** 120
Course Code: YAH-1A	

Board/Authority Prerequisite(s): It is recommended that students have completed PEH 10 prior to taking this course

Special Training, Facilities or Equipment Required:

It is recommended that the teacher have: Emergency First Aid (St. John's Ambulance), CPR training, Athletic taping and Sport First Aid.

Equipment needed includes computers, sports medicine supplies (tape, etc.) and equipment, TV, training tables, skeletal models (foot, hand, cranium, knee)

Course Synopsis:

Sports Medicine is a senior level course for grade 11 and 12 students interested in sports, fitness, recreation or fields such as: athletic training, physical therapy, medicine, fitness, physiology of exercise, kinesiology, nutrition, sports psychology, and other sports medicine related fields. The course includes classwork and practical, hands-on applications in the following areas: prevention, treatment and rehabilitation of sports injuries, emergency procedures, and sports medicine careers. There is also an option to provide first aid and CPR training where available. The course offers connections to local sports medicine specialists either through guest speakers or site visits.

Students will identify the essential components of an effective sports medicine program. They will explore career options and research websites to increase their knowledge of professional organizations and associations of various sports medicine professions. Students will learn and demonstrate basic injury treatment and taping procedures, as well learn about appropriate strength and conditioning rehab programs for specific injuries. They will read sports medicine articles of a personal interest and make presentations on specific sport injury research. The course supports the student learning through meaningful methods of inquiry, interpretation, demonstration, and presentation of a variety of skills on important sports-medicine related topics.

Goals and Rationale:

1. Students will develop specific skills to diagnose, treat and prevent sports-related injuries.
2. Students will learn appropriate communication skills when dealing with injured athletes (asking appropriate questions and interpersonal skills).
3. Students will understand how large the field of sports medicine is and what careers are associated with this field.
4. Students will reflect on their personal nutrition relative to their activity levels.
5. Students will come to understand the injury and setback grief cycle when dealing with an injury.

With the increased number of participants involved in physical activity and competitive sports in schools, such a course will help to meet the increasing need for students to become familiar with the prevention, care, treatment, and rehabilitation of athletic injuries.

The course has been developed to support and encourage students to help prevent injuries, observe procedures and assist in a sports medicine setting, and to explore career options in sports medicine.

Aboriginal Worldviews and Perspectives:

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors. The course includes lessons on the holistic healing that First Peoples would use to treat injury. Exploration of different medicinal remedies is also touched upon.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place). This course allows students to see the need for balance in all aspects of life as well as allowing them to be reflective on their personal nutrition and well being. Students engage in experiential lessons on taping and rehab methods to treat a variety of injuries.
- Learning involves recognizing the consequences of one's actions. This course focus not only on treatment but on prevention of injury.
- Learning involves generational roles and responsibilities. This course touches on the role of elders and healing within the Aboriginal community.
- Learning recognizes the role of indigenous knowledge. Elders bring with them a wealth of indigenous knowledge related to healing.

- Learning is embedded in memory, history, and story. Students learn that learning is transferred down to other generations. Students learn that some of the strategies and techniques covered in this class have deep historical origins.
- Learning involves patience and time. Healing from injuries takes time, patience and understanding of the grief cycle.
- Learning requires exploration of one's identity. Students explore themselves and come to understand how their own choices may impact the degree of injury they might sustain and how to prevent it.
- Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations. Elders have an abundance of knowledge about healing but not all of that is openly shared with others.

BIG IDEAS

Sports medicine includes a variety of careers due to the broad nature of the field.	Understanding the musculoskeletal system aids in understanding the nature of injury.	Proper nutrition and sports psychology play an important role in treatment and prevention of injury.	There are commonalities in injuries throughout the body.	There are a variety of treatment and rehab methods to address specific injuries.

Learning Standards

Curricular Competencies	Content
Students are expected to do the following: ● Explore and describe different sports medicine careers ● Identify and describe different parts of the musculoskeletal system and connect them to various injuries. ● Identify and describe the relationships between healthy eating, overall health, and performance in fitness activities ● Monitor personal nutritional intake and physical activity as a means to reflect on overall health and well-being ● Explain the **grief stages of injury** and connect to, and reflect on, personal injury experiences ● Explain and apply proper techniques to prevent and treat common injuries ● Apply appropriate **communication strategies** when communicating with a person who has sustained an injury ● Assess, manage, and apply protocols and techniques to aid in injury treatment ● Participate in **simulations** where assessment of injury and application of treatment techniques and protocols are necessary	*Students are expected to know the following:* ● **sports medicine careers** ● **musculoskeletal systems** ● **basic sports nutrition** ● **sports psychology of injury** ● **injury prevention** ● **concussion** ● **common injuries** ● communication strategies ● **assessment and management strategies for common injuries** ● **Injury treatment and prevention**

Big Ideas – Elaborations

Curricular Competencies – Elaborations
● **grief stages of injury** - denial, anger, depression, acceptance ● **communication strategies -** includes proper introductions, questions to determine nature of the injury, calming reassurance ● **simulations** includes roles play scenarios with injured participant and athletic trainer, may also relate to case studies

Content – Elaborations
● **sports medicine careers**- for example, physiotherapy, chiropractics, massage therapy, acupuncture, athletic trainer, and other sports related careers ● **musculo-skeletal systems-** difference between axial and appendicular skeletons, functions of the skeleton, specific bones (naming and identification), three types of muscle (skeletal, cardiac, and smooth), specific skeletal muscles (naming, location, and identification), joints (knee, elbow, ankle, wrist, etc); also includes anatomical terminology (anterior, posterior, medial and lateral, etc) and directional movement terms (inversions, abduction, eversions, etc), components of bones ● **basic sports nutrition**- individual caloric intake needed based on physical activity, food groups and Canada Food Guide recommendations, importance of water intake (proper hydration levels, heat stroke), electrolyte balance ● **sports psychology of injury-** injury setback and grief cycle, basics of performance psychology; includes doping ● **injury prevention**- strengthening and conditioning techniques of muscles, ligaments, and tendons to prevent injury, cryotherapy vs. thermal therapy, taping ● **concussion-** diagnosis of concussion, return to play protocol, second impact syndrome ● **common injuries-** lower leg and ankle, upper leg and knee, arm and hand, shoulder, head and spinal injuries, classification and identification includes contusion, laceration, fracture, dislocation, abrasion, acute vs chronic ● **assessment and management strategies for common injuries**- diagnosis (SHARP), inflammation, symptoms of common injuries related to location on body ● **Injury treatment and prevention-** including PRICE, rehab exercises, taping/wrapping procedures

Recommended Instructional Components:

- Direct instruction- musculoskeletal systems, common injuries, treatment techniques, nutrition (what are carbohydrates, proteins, etc),
- Modeling- taping techniques, wrapping techniques, role play scenarios
- Independent Research-3 different injuries for anatomy of injury as well as signs, symptoms, treatment and rehab and prevention of injury

- Videos- Youtube clips of various injuries (concussion, sport psychology) and treatment
- Dissection- of chicken leg and thigh for muscular attachments to bones, joints, tendons and ligaments
- Constructions- elbow joint (with provided materials) to demonstrate movement and connection of joints, build a functional knee, helmet to prevent concussion
- Games- Kahoot!, Jeopardy for content attainment
- Group work with independent component- taping and wrapping techniques, injury treatment
- Individual- reading articles related to injury, prevention, nutrition or rehab
- Group discussion- think, pair, share of article readings

Recommended Assessment Components: Ensure alignment with the Principles of Quality Assessment

Summative-evidence collected	**Formative evidence collected**	**Curricular Competencies**	**Content**	**Success Criteria**
Careers in the Sports Medicine Field Presentation- synthesizing of research (present in 5 slides), and a chart that is completed while listening to other presentations	• research on different careers in the field	• Explore and describe different sports medicine careers	• sports medicine careers	• accurately represents a career including: education required, salary, setting, outlook, description of the actual job and any other interesting facts • can listen respectfully as an audience member • can accurately record relevant details about other careers
Constructions of models of different joints (elbow joint and knee joint)	• quizzes on anatomy • worksheet • games • anatomical terminology Kahoot!	• Identify and describe different parts of the musculoskeletal system and connect	muscloskeletal system including joints, tendons, ligaments, insertion points, origins including anatomical terminology	• correct identification and location of parts of the joints • ability to identify movement of the joint

		them to various injuries.		• using correct anatomical terminology
Unit test- Muscloskeletal systems includes: • functions of the skeleton • what is a tendon, ligament, joint • three types of muscle • anatomical terms • labelling bones and muscles	• constructions • Kahoot! • worksheets • diagram labelling • dissections	• Identify and describe different parts of the musculoskeletal system and connect them to various injuries.	muscloskeletal system including components of bones, joints, tendons, ligaments, insertion points, origins including anatomical terminology	• correct identification and location of parts of the joints • can correctly identify the three types of muscles • is able to use correct anatomical terminology when describing a joint/tendon/ligament/ muscle • can correctly explain the function of the skeleton and its associated muscles
	• Sports psychology and doping lesson • grief stages of injury- personal reflections	• Explain the **grief stages of injury** and connect to, and reflect on, personal injury experiences	• sports psychology of injury	• can correctly identify the 4 stages of grief and make a personal connection to those stages • understand how doping and sports psychology may impact risk of injury
Food and exercise journal and reflection at the end of the monitoring period	• basics of nutrition lessons (macro vs micro nutrients) • factors to determine appropriate caloric intake (age, gender, level of activity)	• Identify and describe the relationships between healthy eating, overall health, and performance in fitness activities	• basic sports nutrition	• can accurately record and calculate caloric intake • can reflect in a meaningful way the connection between the Canada Food Guide recommendations and

		• Monitor personal nutritional intake and physical activity as a means to reflect on overall health and well-being		their personal diet
Unit test on the body's reaction to injury- inflammation as a response Focus: Lower leg, ankle and foot, knee and upper leg Anatomy and three common injuries- signs, symptoms, treatment and rehab and prevention	• inflammation cartoon depicting what inflammation is • diagrams-labelling and fill in the blanks for anatomy of lower leg, ankle and foot, knee and upper leg • treatment options for lower and upper leg injuries • Construction of the knee • Practicing taping and wrapping procedures of two different body parts (timed) • Communicaton	• Explain and apply proper techniques to prevent and treat common injuries • Assess, manage, and apply protocols and techniques to aid in injury treatment • Apply appropriate **communication strategies** when communicating with a person who has sustained an injury	• injury prevention • common injuries • assessment and management strategies for common injuries • Injury treatment and prevention • communication strategies	• Correctly identify the 3 stages of inflammation • Can accurately describe SHARP and PRICE protocols • Correctly identify bones, ligaments, joints and muscles of the lower leg ankle, and foot • Accurately describe the steps for taping and wrapping an ankle
Unit test Focus: Shoulder, arm, wrist and hand, head (concussions) Anatomy and three common injuries- signs, symptoms, treatment	• construction of elbow joint • practice taping wrist, thumb, and elbow and wrap shoulder • anatomy- label diagrams • injury research presentation • concussions- protocols and second impact	• Explain and apply proper techniques to prevent and treat common injuries • Assess, manage, and apply protocols and techniques to aid in injury treatment	• injury prevention • common injuries • assessment and management strategies for common injuries • injury treatment and prevention • communication strategies	• Can accurately describe SHARP and PRICE protocols • Correctly identify bones, ligaments, joints and muscles of the lower leg ankle, and foot • Accurately describe the steps for taping wrist, thumb, and elbow and wrapping the shoulder

	syndrome	• Apply appropriate **communication strategies** when communicating with a person who has sustained an injury		
Injury research presentations	• upper and lower body anatomy and injuries • research	• Explain and apply proper techniques to prevent and treat common injuries • Assess, manage, and apply protocols and techniques to aid in injury treatment	• injury prevention • common injuries • assessment and management strategies for common injuries • Injury treatment and prevention	• can accurately describe the anatomy • can accurately identify the signs and symptoms of the injury • can provide relevant treatment and rehabilitation options • can provide various prevention techniques to prevent future injuries
Final assessment: 1. Taping and Wrapping procedures of two different body parts (timed) 2. Summative Final	Assessment includes: • proper taping and wrapping techniques including effective communication • sports psychology • nutrition • anatomy and injury identification and treatment • concussion protocols and second impact syndrome			

Learning Resources: (this is not an exhaustive list)

1. PRICE method: https://www.youtube.com/watch?v=LNpwRAYMFxs
2. Common injuries:
    a. https://www.youtube.com/watch?v=upxeWJs5Pio
    b. groin pull:https://www.youtube.com/watch?v=VPDTdIctV9M
    c. tennis elbow:https://www.youtube.com/watch?v=8B6H0qKJiSk
    d. hamstring pull: https://www.youtube.com/watch?v=EPYQgwA15Aw
    e. shin splints: https://www.youtube.com/watch?v=0lJmZtJv5kc
3. Sodexo education (series on nutrition) https://www.youtube.com/watch?v=r6EUPc-Faa8&list=PLHjvMn8GTsWzdRdAaCm4A982hfM24kC4c
4. Doping for Gold documentary https://www.youtube.com/watch?v=TfF7hd3IsGo
5. TEDX Sports Psychology https://www.youtube.com/watch?v=jILkzPR-T5E
6. Ankle taping https://www.youtube.com/watch?v=0lyAtixAMGE
7. Musculoskeletal systems www.iInnerbody.com

Additional Information: