



Board/Authority Authorized Course

Health Services 12B – EMR Independent Study

School District/Independent School Authority Name: <i>Chilliwack School District</i>	School District/Independent School Authority Number (e.g. SD43, Authority #432): 33
Developed by: <i>Joel Sutcliffe</i>	Date Developed: <i>November 15, 2017</i>
School Name: <i>Sardis Secondary School</i>	Principal's Name: <i>Dan Heisler</i>
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: 12
Number of Course Credits: 4	Number of Hours of Instruction:

Board/Authority Prerequisite(s):

Students must be enrolled in the Health Services 12A – EMR, in order to register for this online course.

*This is a **co-requisite** online course that covers all of the related theory for the EMR course, and will prepare students for the written exam.*

Special Training, Facilities or Equipment Required:

The teacher is required to hold a current Red Cross First Aid Instructor Award, and a current Emergency Medical Responder license. They must be an instructor in good standing with the Justice Institute of BC.

This online course will be run through the school district Moodle platform, and be maintained and assessed by the same teacher as Health Services 12A – EMR. This will not require extra “teacher time” but instead will enable a smaller class size of 15 students in both EMR courses.

Course Synopsis:

*This course must be taken in conjunction with **Health Services 12A - EMR** to complete all of the requirements for the program. This online course is worth a full course credit in addition to the practical material in this course.*

*The **Health Services 12B – EMR Independent Study** courses prepares students for the Emergency Medical Responder (EMR) certification in partnership with the Justice Institute of BC. Final assessment will follow Justice Institute criteria, including written exams and practical exams. If successful, this is worth post-secondary credits in addition to high-school credits.*

The Emergency Medical Responder course is an introduction to emergency medicine and is a level above First Responder (FR) or Occupational First Aid training. The online EMR course provides candidates with foundational knowledge in human anatomy, physiology, pathophysiology and pharmacology; supporting further learning and development in health science. This course focuses on the core knowledge within the Emergency Medical Responder level of practice as defined by the Paramedic Association of Canada (PAC).

EMR certification meets one of the mandatory admission requirements for the Justice Institute's School of Health Sciences' Primary Care Paramedic Program and Diploma in Health Sciences (EMS) Academic Pathway.

This course provides training that students require in order to gain employment as an Emergency Medical Responder within a range of areas including: ambulance services; industrial and workplace settings as a first-aid attendant; life guarding; ski-patrol and medical response for fire departments.

Certified graduates are eligible to apply for EMR licensure in British Columbia through the Emergency Medical Assistant Licensing Branch (EMALB).

Goals and Rationale:

- To provide students with a structured and engaging program of learning and application of the theory necessary for the EMR certification*
- To prepare students for further education or a career within health care*
- To provide successful students with an Emergency Medical Responder certification for provincial licensing applications*
- To provide post-secondary credits through a partnership agreement with the Justice Institute of BC.*

Aboriginal Worldviews and Perspectives:

This course would emphasize the aboriginal value of connectedness and relationship. It provides time for students to connect with each other in discussion and reflect on their learning as the course proceeds. It provides much more guidance than simply “go read the book – be ready for the test”. It also incorporates some important principles of learning:

- Learning about emergency medicine ultimately supports the well-being of the self, the family, and the community.*
- Learning through discussion and reflection is holistic, reflexive, reflective, experiential, and relational*
- Learning about saving lives involves recognizing the consequences of one's actions.*

- *Learning about patient consent and confidentiality involves recognizing that some knowledge only shared with permission and/or in certain situations.*

BIG IDEAS

Emergency medical work requires **professionalism**

Emergency medical workers are expected to have a current base of **knowledge**

Emergency medical workers must be able to perform resuscitation **procedures.**

Emergency medical workers must use **judgment** in following specific medical assessment and treatment protocols.

Emergency medical workers must be capable of traumatic injury **management.**

Learning Standards

Curricular Competencies	Content
<p><i>Students are expected to do the following:</i></p> <ul style="list-style-type: none"> • Understand the importance of personal safety • Apply legislation to specific scenarios • Discuss issues of professionalism and ethics • Use judgment in the application of principles, procedures, and protocols • Understand the theory and limitations of diagnostic tools • Explain the anatomy, physiology, etiology, signs and symptoms of medical emergencies • Apply knowledge to specific medical scenarios • Understand considerations for special populations • Be aware of hazards present in different environments • Understand and apply principles of triage • Explain transportation safety rules • Apply principles of patient management to a variety of scenarios • Explain the anatomy, physiology, etiology, signs and symptoms of various injuries 	<p><i>Students are expected to know the following:</i></p> <ol style="list-style-type: none"> 1) Emergency Medicine Introduction EMS System, Legal and Ethical issues, Professionalism, Personal Safety, Communicable Diseases, Equipment Use, Basic Anatomy, WHMIS, Reporting Child Abuse, Critical Incident Stress 2) Patient Assessment Scene Evaluation, Primary and Secondary Survey, Decision Making and RTC, Pulse Oximeter, Blood Pressure, Auscultation 3) Medical Emergencies Resuscitation, Airway Adjuncts, Suction, Oxygen Therapy, AED, Cardiac and Respiratory Emergencies, Anaphylaxis, Diabetes, Overdose and Poisoning, Cerebrovascular Emergencies, Seizures and Neurological Conditions, Environmental Emergencies, Bites and Stings 4) Patients and Protocols Pharmacology, IV Maintenance, Mental Health, Special Populations, Pediatric and Geriatric Considerations, Psychological Emergencies, Pregnancy Complications and Child Birth, Hazardous Materials, Agriculture and Industrial Emergencies, Water Emergencies, Triage (MCI), Transportation Safety 5) Injury and Trauma Hemorrhage Control, Skin Conditions and Soft-tissue Injuries, Head/Neck/Face Injuries, Torso Injuries, Spinal Management, Burns and Electrical Injuries, Musculoskeletal Injuries

Big Ideas – Elaborations

- 1) **Professionalism.** This includes personal safety, leadership, teamwork, decision-making, communication skills, punctuality, self-reflection, etc.
- 2) **Knowledge.** This includes a desire to learn, critical thinking, information literacy, independent and group learning, communication, etc.
- 3) **Procedures.** It is crucial that emergency workers see the value in adhering to specific procedures and protocols
- 4) **Judgement.** Students must be able to assess given information and use judgement to make appropriate decisions about the next steps.
- 5) **Management.** This refers to the ability to manage the injury, manage the patient, manage the team, and manage the situation.

Curricular Competencies – Elaborations

The curricular competencies for this course are defined by the Justice Institute EMR curriculum (and the Red Cross SFA/CPR curriculum). However, a lot of the skill assessment is done in the *Health Services 12A – EMR* practical course. This course is focused mostly on the knowledge necessary for the written exam.

- **personal safety** includes safe lifting, risk of communicable disease, critical incident stress, etc.
- **legislation** might include BC Ambulance policy, WorkSafeBC legislation, the BC Human Rights Code, Liability and Negligence, etc.
- **ethics** refers to the moral principles that inform good decision-making
- **principles** such as “time vs. quality of care” are used to prioritize and apply judgement
- **procedures** are the step-by-step approach to deal with specific scenarios (ex. CPR procedure)
- **protocols** refer to specific regulations on things like medication administration (ex. Entonox protocol)
- **diagnostic** tools include pulse oximeters, blood pressure cuff, stethoscope, glucometer, etc.
- **anatomy** is the naming of specific body parts
- **physiology** is how body systems work
- **etiology** is how a disease/illness/injury develops and affects the body
- **signs** are visible evidence of medical issues or injury and **symptoms** are the problems reported by the patient
- **special populations** refers to special consideration for groups of people such as children, elderly, pregnant, disabled, diseased, etc.
- **different environments** include learning about situations hard to simulate (ice, water, enclosed space, accident, industrial, agricultural, etc.)
- **triage** refers to the prioritization of multiple patients
- **transportation safety** includes learning about general safety when traveling in an ambulance or helicopter

Content – Elaborations

The content for this course is largely defined by the Justice Institute EMR curriculum (and the Red Cross SFA/CPR curriculum). This course is focused mostly on the knowledge necessary for the written exam.

Content – Elaborations

EMS = Emergency Medical System

WHMIS = Workplace Hazardous Materials Information System

RTC = Rapid Transit Category

Auscultation is the use of the stethoscope to assess respiratory function

Airway Adjuncts include oropharyngeal airways and nasopharyngeal airways

AED = Automated External Defibrillator

Pharmacology is the study of drug actions and effects

IV Maintenance: EMR's are only required to assist with maintaining IV's but must be able to understand and calculate drip rates

Pediatric = children

Geriatric = elderly

Hemorrhage = bleeding

Soft-tissue Injuries = all types of wounds

Torso Injuries = chest, abdominal, and genital injuries

Musculoskeletal Injuries = fractures/sprains/dislocations

Recommended Instructional Components:

This course will be hosted with the Moodle platform, and somewhat paced to match the practical course.

- *Guided Reading*
- *Summary Notes*
- *Videos*
- *Assignments*
- *Online Discussion Forums*
- *Quizzes/Tests*

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

Knowing and Understanding

Written Quizzes/Tests 50%

Timed, Instant Feedback, Repeatable, Mastery (Minimum mark) is required before moving on

Understanding and Doing

Assignments/Discussions 50%

Reflection/Application Questions

Learning Resources:

1. Emergency Medical Responder: A Skills Approach. Fourth Canadian Edition, 2013. K. Karren et al. ISBN 978-0-13-289257-5
2. Canadian Red Cross First Aid & CPR Manual. Canadian Red Cross 2014. ISBN 978-158480-513-7
3. Emergency Medical Responder Student Study Guide and Resource Manual (2015). Justice Institute of British Columbia, School of Health Sciences.
4. BC Emergency Health Services Act, Emergency Medical Assistants Regulation. BC Reg. 210/2010 (Available online at the following link: www.bclaws.ca/civix/document/id/complete/statreg/210_2010)
5. British Columbia Emergency Health Services Treatment Guidelines (Available online at the following link: www.bctg.bcas.ca)

Additional Information:

Much of this information is copied from the Justice Institute EMR Course Outline that is available online:

http://www.jibc.ca/sites/default/files/health_sciences/pdf/OfficialCourseOutline_PARA-1050.pdf

This same EMR course is offered at two other high schools in BC, and I am proposing a similar model to Rutland Secondary School in Kelowna. Information on their program can be found online: <http://www.rss.sd23.bc.ca/Programs/emr/Pages/default.aspx>