**Health Science 12**  **COURSE  OUTLINE**  **Mr. C. Lesiuk**

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Health Science 12 is comprised of the Big Ideas, Curricular Competencies, and Content. Overarching the subject specific curriculum are Core Competencies that are embedded into every subject and grade.

**Big Ideas** – what students are expected to understand:

**Careers Exploration** -Identifying personal interests and passions, then exploring the pros and cons of a variety of careers to help recognize possible career paths that are a good personal fit for each student.

**Health and Wellness** - Investigating how personal lifestyle choices (both good and bad) correlate to overall health and wellbeing, to allow students to make wise decision with respect to their immediate and future quality of life.

**Body Movement** – Exploring the musculoskeletal system to develop the ability to critically think of how specific muscle contraction and specific joint anatomy allows for specific movements. As well as to analyze how improper movement results in joint and muscle injuries.

**Disease and Disorder** – Delve into research on a variety of disorders and diseases to better understand the mechanism, health impact, diagnosis, and treatment of such common disorders and diseases.

**Health Care Practices** – To practice and become competent with performing commonly used health care skills. Skills such as, hand-washing, questioning patients, urinalysis, sterile technique, intubating airways, CPR, reading EKGs, administering a peripheral IV line as well as sport-taping. All skills will be done in a very safe way, using only artificial urine, and human (leg/torso/arm,head) models and workshops will be run by certified trainers.

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| **Curricular Competencies – Elaborations** |
| •􀀁 **CAREER EXPLORATION**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁 Career spotlight questionnaires will be completed during career guest speaker presentations.  —􀀁 Students will reflect on their own career interests and how well the pros and cons of various careers align with their own personal interests and passions.  —􀀁 Opportunities provided for job shadow placements will be provided for students.  —􀀁 Field trips to post-secondary training institutes and health care facilities.  —􀀁 Opportunities to meet and interview medical students will be provided via UBCO Faculty of Medicine – "Volunteer Patient Program".  •􀀁 **MEDICAL TERMINOLOGY:**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁 Students will learn how to break large complex medical terms into smaller Greek and Latin root words.  —􀀁 Students will learn to become familiar with some commonly used root words and they will be able to make connections with how those root words are often found in our everyday English language.  •􀀁 **HEALTH AND WELLNESS:**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁Students will explore the advantages of practicing good fitness, nutrition and other healthy lifestyle practices.  —􀀁 Students will acquire the skills to critically analyze and interpret foods and nutrition food facts labels in order to categorize healthy vs. unhealthy foods.  —􀀁 Students will investigate what lifestyle decisions would improve their own health.  —􀀁 Students will be able to develop a healthy dietary plan for themselves.  •􀀁 **ANATOMY AND PHYSIOLOGY:**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁Students will critically analyze how form follows function with respect to histology, muscular system and skeletal system  —􀀁 Students will investigate the skeletal system to become experts with respect to skeletal system functions, categorizing bones, micro-structure, major bones of the skeleton, fractures, and skeletal system disorders  —􀀁 Students will investigate the muscular system to become experts with respect to muscular system functions, categorizing muscle tissue types, micro-structure, micro-physiology, major muscles of the muscular system, and muscle injuries and treatment.  —􀀁 Students will critically analyze body movements to determine prime movers and their insertions and origins.  **HEALTH CARE COMPETENCIES:**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁 Students will acquire field skills to allow them to perform basic health care practices such as: Sterile technique, urinalysis, taking blood pressure etc.  —􀀁 Students will practice microscopy skills in preparation for post-secondary programs.  —􀀁 Students will be able to properly research and critically analyze sources in preparation for presenting accurate information to their peers.  —􀀁 Students will be provided opportunity to enhance their dissecting skills and collaborative skills through group dissections.  **DISORDERS AND DISEASES:**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁 Students will self-reflect to identify disorders or diseases that they have an interest or personal connection with.  —􀀁 Students will enhance their research practices with the help of librarian's expertise.  —􀀁 Students will be able to properly research and critically analyze sources with respect to their topic in preparation for presenting accurate information to their peers.  —􀀁 Students will investigate how lifestyle choices, especially nutrition and fitness greatly impact their overall health.  —􀀁 Students will self-reflect and identify on how their own lifestyle choices are affecting their current health.  —􀀁 Students will be able to critically evaluate health claims to help determine their legitimacy.  **COMMUNICATION, COLLABORATION AND PRESENTATION SKILLS:**  *Samples of methods by which students will be supported with their inquiry:*  —􀀁 Students will work with partners, small groups, and perform classroom presentations in an effort to improve their personal communication, collaboration and presentation skills.  —􀀁 Students will be capable of using evidence, develop a public service announcement that highlights the importance of healthy, safe lifestyle options for teenagers.  WHEN THE COURSE IS COMPLETED STUDENTS WILL BE ABLE TO LOOK OVER THE LIST OF CURRICULAR COMPETENCIES LISTED ABOVE AND THEY WILL BE ABLE TO SWAP ALL STATEMENTS THAT INCLUDE "STUDENTS WILL" so that they can rephrase them as **"I CAN"** STATEMENTS. |

| **Content – Elaborations** |
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| *Students are expected to know the following:*  •􀀁 **Pros and cons of various health care careers with respect to their own personal interests.**  •􀀁 **Principles of analyzing and interpreting scientific and medical terminology.**  •􀀁 **Basic nutrition concepts for deciphering healthy nutrition vs malnutrition.**  •􀀁 **Histology and the anatomy and physiology of various cells and tissues.**  •􀀁 **Microscopy skills.**  •􀀁 **Cancer and cancer treatment.**  •􀀁 **Anatomy and Physiology of the Skeletal System.**  •􀀁 **Anatomy and Physiology of the Muscular System.**  •􀀁 **Common health disorders and diseases and how they are treated in the medical field.**  •􀀁 **Lifestyle differences and their effects on human health.**  •􀀁 **Practice and develop various health care techniques and practices commonly used by health professionals.** |

**Core Competencies** are sets of intellectual, personal, and social and emotional proficiencies that all students need to develop in order to engage in deeper learning. The Core Competencies include thinking, communication, and social and personal competencies.

The communication competency encompasses the set of abilities that students use to impart and exchange information, experiences, and ideas, to explore the world around them, and to understand and effectively engage in the use of digital media. Communication competency provides a bridge between students’ learning, their personal and social identity and relationships, and the world in which they interact.

The thinking competency included both creative and critical thinking.  Creative thinking involves the generation of new ideas and concepts that have value to the individual or others, and the development of these ideas and concepts from thought to reality.  Critical thinking involves making judgments based on reasoning: students consider options; analyze these using specific criteria; and draw conclusions and make judgments. Critical thinking competency encompasses a set of abilities that students use to examine their own thinking, and that of others, about information that they receive through observation, experience, and various forms of communication.

**First Peoples knowledge and perspectives** –The Health Science 12 Curriculum is designed to acknowledge, recognize, and respect the First Peoples Principles of Learning:

* Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
* Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
* Learning involves recognizing the consequences of one’s actions.
* Learning involves generational roles and responsibilities.
* Learning recognizes the role of indigenous knowledge.
* Learning is embedded in memory, history, and story.
* Learning involves patience and time.
* Learning requires exploration of one’s identity.
* Learning involves recognizing that some knowledge is sacred and only shared with permission and/or in certain situations.

**EVALUATION** – Students will be assessed and assigned grades based on the Curricular Competencies and Curricular Content, however student progress towards Core Competencies will be self-assessed.

Each term is 40% of the final letter grade.  The final assessment is 20% of the final letter grade.

Each term will have tests, quizzes, labs, and assignments.

The following is a break down of how your school mark will be determined:

Term Marks

Tests and Quizzes 75%

Labs, Class Work and Assignments 25%

The combined components will always total 100%

Final Mark

Term 1 40%

Term 2 40%

#### Final Project 20%

Total 100%

**Expectations** –

Students are expected to have regular attendance, come to class on time and make efficient use of class time. As this class is very fast paced, it is important that you get the notes from a reliable source in the class and check with your source to ensure you got any missed handouts from me.

## Attendance and Lates. The school’s attendance policy will be strictly followed; you need to arrive to class on time, truancy will not be accepted. If you skip a class or neglect an assignment your marks will reflect your lack of effort.

I encourage you to be proactive if you are absent . . . find out what was covered from me or other students, have your parent/guardian call the school to excuse your absence. It is your responsibility to make sure that a parent/guardian phones in to excuse your absence.

**It is essential that you use the following website to keep up with the course:**

***<https://lesiukbiology.weebly.com/>***

I am generally in my room before school by 8:15 a.m. if you need help with things, please arrange to meet with me on a given morning that works for the two of us.

1. Projects and Assignments

* In this course you can expect to have a few larger assignments and projects. You will have plenty of daily in-class assignments. All assignments should be fully completed and of superior quality. There will be little to no homework in this course, as I can appreciate that many of you will already be carrying the burden of a heavy course load and all the expectations that these courses will demand of you. For each guest speaker you will be required to be in attendance and you will need to fill in a "Career Spotlight" summary sheet for marks.

1. Tests and Quizzes

* You can expect a few quizzes and tests . . . you will be given plenty of advance notice for major tests. This course is not heavy on testing.
* Rather than selecting to re-write a given test, all of our tests will be a re-write of the material covered in our quizzes and practice quizzes. So make sure that you are properly prepared for every test/exam.
* If you miss a quiz or test for any reason, it will be entirely your responsibility to make up the test/quiz immediately upon your return. Despite writing the test/exam, you will be issued a mark of zero until your absence checks out as being legitimately excused. IF YOU MISS MORE THAN 3 TESTS PER TERM, YOU WILL BE REQUIRED TO WRITE A MID-TERM EXAM AT THE END OF THAT TERM. YOUR PERCENT ON THAT MID-TERM EXAM WILL GO TOWARD ALL OF YOUR MISSED TEST MARKS.

1. Progress
   * If you do not maintain an adequate mark in this course, I will recommend that you drop this course and pick up a course more suitable to your ability and effort. There are always a number of students on the waiting list that want to be in your seat!

Good luck and enjoy the class!



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 Mr. C. LESIUK