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Sponsor Teacher: Mr. G. Francis
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Class Overview:

Life Sciences 11 introduces students to living things and to the taxonomic system. Students will learn the features of organisms, how scientists classify living things, and other key concepts such as ecology, biodiversity, microbiology, botany, and zoology. This engaging course has four main themes of study: characteristics of living things (cells and viruses), process of evolution, and taxonomy of bacteria, fungi, plants, and animals. This course will also include Indigenous perspectives of the living creatures in the Pacific Northwest to help instill and enhance understanding in all students.

The Big Ideas Covered in Life Sciences 11:

- Life is a result of interactions at the molecular and cellular levels
- Evolution occurs at the population level
- Organisms are grouped based on common characteristics

Class Units:

Timeline	Unit	Focus	Approx. % of Mark
Week 1	Fundamentals of Biology	Branches of biology, interconnectedness of life and the environment	4%
Week 1 - 2	Characteristics of Living Things	Cell structures and functions, unicellular vs multicellular organisms	14%
Week 3	Process of Evolution	Modern theory of evolution, natural selection, modern considerations	18%
Week 4	Introduction to Taxonomy	The taxonomic system, principles of taxonomy, scheme development	3%
Week 4 - 5	Microbiology: Archaea, Bacteria, & Viruses	Structure, characteristics, reproduction, interaction with humans	15%
Week 6 – 8	Botany	Intro to protists, fungi, and plants, diversity, human uses	18%
Week 9 – 10	Zoology	Intro to animals, lower and higher invertebrates, phylum chordata	18%
Week 10	Final Exam		10%

**Please note: the timing and weight of this plan is subject to change depending on how much emphasis is placed on specific areas of study. My goal is to have students learn and develop the curricular competencies while pursuing subjects they find most interesting.*

Curricular Competencies:

As we move throughout Life Sciences 11, students will develop their ability to:

- Question and predict
- Plan and conduct experiments
- Process and analyse data and information
- Evaluate and critically analyze knowledge and information
- Apply and innovate using knowledge connected to Life Sciences 11
- Communicate ideas and understanding

To be successful in this class it is essential that students attend class, demonstrate focus, participation and willingness to engage in class learning, discussions, assignments, and projects. I will include as much *Project Based Learning* into this course as possible as it is currently recognized as one of the best strategies to engage students in their learning while developing curricular competencies.

Assessment:

Formative assessment: will consist of worksheets, educational games, quizzes, and other types of “check-in” activities. These activities will be used to assess how well students are understanding class concepts and will only be assessed for participation.

Summative assessment: will consist of unit tests, laboratory reports, and class projects. These activities will count towards students’ overall mark.

Observation assessment: will consist of my observations of student effort and participation in relevant activities and will be issued utilizing the NorKam CARES effort matrix.

NorKam Attributes:

Students are expected to demonstrate the attributes of *Global Citizenship, adaptability, and inquiry*. These attributes will be incorporated into the rubrics of students projects.

The attribute of adaptability is especially relevant for both students and teachers as we engage in learning during a challenging time. In the event that a student will need to be away for a period of time, or other changes need to be made to class delivery, please maintain consistent communication with your teacher.

I am excited for the semester ahead filled with learning, personal development, critical thinking, and of course – fun! Please never hesitate to ask questions/contact me throughout the semester if you have questions or require any additional support. I will usually be available in my classroom during lunch time, or time can also be scheduled via appointment. I am here to help each of you succeed in my class! 😊