

**NOTE**            **A COURSE OUTLINE SUPPLEMENT WAS DISTRIBUTED IN YOUR MATH CLASS WITH INFORMATION PERTINENT TO ALL COURSES.**

**Course**            ADVANCED BIOLOGY – BIO504

**Level**             Cycle 2 year 3, secondary 5

**Course Description and Objectives**

The students taking advanced biology will gain an appreciation for the living things around them. Several branches of biology will be studied to give the student an overview of the science: taxonomy, microbiology, botany and zoology to name a few. Through experimentation and research, students will learn to appreciate the simplicity and complexity of living organisms. Students will learn about evolution and adaptations explore how

**Broad Areas of Learning**

The broad areas of learning are described on the course outline supplement.

**Cross-Curricular Competencies**

The cross-curricular competencies are described on the course outline supplement.

**Course Topics**

**What is Life?** :                    What is a living thing?  
biogenesis, characteristics, classification, origin of life

**Exploring the 6 kingdoms:**    What are the living things around us?  
Simplicity and complexity  
microbiology, botany and zoology

**Evolution and Adaptation:**    Where were we? Where are we going?  
fossils, Darwin,  
biodiversity  
climate change/pollution

## **Assessment**

General information and attendance requirements for all courses are described on the course outline supplement. The table below describes the specific competencies and the relative weighting for this subject.

Competency	Description	Weighting
1. Seeks answers or solutions to scientific problems.	Focuses on the methodology used to solve scientific problems. The student becomes familiar with concepts and strategies using a hands-on approach. Students must ask questions and solve problems through observation and laboratory experimentation.	20%
2. Makes the most of his/her knowledge of science	Focuses on the student's ability to conceptualize and apply what they have learned in science. It involves examining the very nature of scientific knowledge, its evolution and its numerous societal and environmental consequences.	50%
3. Communicates in the languages used in science.	Participates in exchanging scientific information. Interprets scientific messages. Produces and shares scientific messages.	30%

## **Note**

Goggles are mandatory for all laboratory work.