HOLY TRINITY CATHOLIC SECONDARY SCHOOL COURSE OUTLINE



Grade 12 Biology - SBI4U

Course Prerequisite: SBI3U , SCH3U is strongly recommended

Course Description: This course provides students with the opportunity for in-depth study of the concepts and processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biochemistry, metabolic processes, molecular genetics, homeostasis, and population dynamics. Emphasis will be placed on the achievement of detailed knowledge and the refinement of skills needed for further study in various branches of the life sciences and related fields.

Catholic Graduate Expectations: A crucial theme in the course is the theory of evolution. As such, it provides a framework around which knowledge, skills and values are organized. Catholic beliefs, values and teachings related to this theme include: God as Creator, God's Providence, and the value and dignity of the human person. While the aforementioned are pervasive throughout the profile, there are also values, teachings and beliefs particular to each unit. The homeostasis unit raises issues about the value of human life, the sacredness of the body and the conjugal act, and the accessibility and marketing of health care. The molecular genetics unit also raises the question of stewardship of the environment. The population dynamics unit includes values related to the common good.

Units of Study

| Unit 1 | Biochemistry |
|--------|---------------------|
| Unit 2 | Metabolic Processes |
| Unit 3 | Molecular Genetics |
| Unit 4 | Homeostasis |
| Unit 5 | Population dynamics |

Evaluation

| 70% | 30% | |
|-------------------------|------------------------|--|
| Knowledge/Understanding | Culminating Task – 10% | |
| Thinking/Inquiry | | |
| Communication | Exam – 20% | |
| Application | | |

| Course Resources Required: | | | | | | | |
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For a detailed course description of this course, please visit https://www.edu.gov.on.ca/eng/**curriculum**/secondary