HOLY TRINITY HIGH SCHOOL
COURSE OUTLINE
GRADE 10 ACADEMIC SCIENCE (SNC 2D)

DIPLOMA AREA: Science

GUIDELINES: The Ontario Curriculum Guidelines; Grades 9 and 10 Science

GRADE LEVEL: 10 - Academic

INSTRUCTOR: Mrs. McGuinness http://hmcguinness.pbworks.com/ (Also accessible from the Holy Trinity homepage)

TEXTBOOK: Nelson Science Perspectives 10

INFUSION STATEMENT:
The study of science helps students to learn, to be reflective, and to become critical thinkers. This course enables students to become discerning believers who understand the theories of science and can apply them to the world around them. Our faith is strengthened by our improved ability to reason and to seek the truth. Students will become aware of the sacred dimension of the physical world and of their role as stewards of God's creation.

DESCRIPTION:
This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics and the interrelationships between science, technology, society, and the environment. Students will develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid-base reactions; forces that affect climate change; and the interaction of light and matter.

UNITS OF STUDY:

A. Scientific Investigation Skills and Career Exploration

These concepts will be integrated over the course of the semester.

B. Chemistry: Chemical Reactions

Chemicals react with each other in predictable ways. Chemical reactions may have a negative impact on the environment, but they can also be used to address environmental challenges.

C. Biology: Tissues, Organs, and Systems of Living Things

Plants and animals, including humans, are made of specialized cells, tissues, and organs that are organized into systems. Developments in medicine and medical technology can have social and ethical implications.

D. Earth and Space Science: Climate Change

Earth's climate is dynamic and is the result of interacting systems and processes. Global climate change is influenced by both natural and human factors. People have the responsibility to assess their impact on climate change and to identify effective courses of action to reduce this impact.

E. Physics: Light and Geometric Optics

Light has characteristics and properties that can be manipulated with mirrors and lenses for a range of uses. Society has benefitted from the development of a range of optical devices and technologies.

Note: The order of the units may not be presented as listed above.

COURSE EVALUATION:

Term Assessment Weighting	70%	Final Assessment Weighting	30%
Knowledge/Understanding general understanding, terminology, and connections to other concepts **Thinking/Inquiry/Problem Solving** safety practice, lab skills and reports **Communication** oral and written skills, use of terminology, symbols, and units **Application/Making Connections** understanding connections of content to technology, society and environment	30% 20% 10% 10%	**Final Examination** 1. Knowledge/Understanding 2. Thinking/Inquiry/Problem Solving 3. Communication 4. Application/Making Connections **Culminating Activity** May consist of a cumulative course activity or a lab practical	20% 10%

LEARNING SKILLS:
In addition to the grades that will be given on the tasks listed above, students will also be assessed on five essential learning skills as they are demonstrated throughout this course.

1. Initiative
responding positively to challenges, taking risks, seeking new opportunities for learning; proposing alternatives or innovative ideas or approaches to tasks; resourcefully seeking additional information; seeking clarification or assistance when needed; practicing self-evaluation and making changes/improvements in response; participating frequently and enthusiastically in class discussion or activities

2. Work Habits/Homework
completing daily homework tasks; conscientiously completing tasks to the best of one's ability; effectively using class time; effective study practices; familiarity with and use of available resources; effort

3. Organization
following appropriate steps to complete complex tasks; organizing and managing time and information well, thinking ahead; planning for the unexpected; using a planner to organize daily homework and other tasks; keeping notes and organizing information in a notebook; arriving to class on time, with all required materials, in complete uniform

4. Teamwork
working cooperatively with others; accepting one's role in the group effort; performing various roles in a group; demonstrating positive interpersonal skills in cooperating with others

5. Working Independently
accomplishing tasks in a self-directed and independent manner, requiring little prompting or assistance; following instructions; completing all tasks assigned; submitting or performing tasks on time

Learning skills will be assessed on a four-point scale:

E (excellent) G (good) S (satisfactory) N (needs improvement)

Classroom Guidelines and Expectations:

1. All work is to be kept in a 3 ring binder specific to this course. All notes should be completed in pen and kept in order with a title and dated.

2. Students should come to class with a pen, pencil, ruler, coloured pencils, graph paper, lined paper, a calculator, and a textbook. They will not be permitted to leave the classroom to retrieve these items should they forget to bring them.

3. All assigned work must be handed in at the beginning of the lass on the due date. Late work will be subject to a 10% penalty unless a new due date is agreed upon prior to the original due date.

4. Plagiarized assignments will be considered non-submissions and will be referred to the office.

5. All tests shall be written on the test day. It is the responsibility of the student to produce a parent/guardian note explaining a valid absence if a test or quiz is missed.

6. If legitimately absent on the day of a test, it is expected to be written on the day of return, not during class time (i.e. at lunch, before or after school). Please call me or see me to make the arrangements.

7. All homework is to be completed on a nightly basis, and will be checked periodically.

8. The school late policy will be enforced. Refer to your student agenda for details.

9. Each person and their property will be treated with respect at all times.

10. Each person is expected to act responsibly and according to safety guidelines when in the lab.

11. Extra help is available upon request. Please see me if you do not understand a concept and we will arrange a time to review.

THIS IS A GREAT COURSE!!!!!!!!!! It is filled with labs and fun activities dealing with all aspects of science. Maturity and responsibility play a key role in how successful you will be in this course. Please be sure that you have read all of the above expectations over carefully and understand them fully. I look forward to a great semester!!!

If you or your parents/guardians have any questions or concerns please feel free to contact me at the school 905 775 4841 ext. 436. Information can also be found at the course website. Follow the links on the Holy Trinity High School home page.

Mrs. McGuinness

STUDENT SIGNATURE:_____

PARENT SIGNATURE:_____

DATE:_____