Sacred Heart Catholic High School
Grade 10 Academic Science
2026-2027

Teacher: Mr. Jeff Baxter

Prerequisite Course: Grade 9 Science (SNC1W)

Description and Overall Expectations: This course enables students to enhance their understanding of concepts in biology, chemistry, earth & space sciences and physics, and the interrelationships between science, technology, society and the environment. Students will also develop their scientific investigation skills.

Scientific Investigation (inquiry & research) and Career Exploration: demonstrate scientific investigation skills in the four areas of skills - initiate and plan, perform and record, analyse and interpret, communicate; identify and describe a variety of careers related to the fields of science under study, identify scientists (including Canadians) who have made contributions to these fields

Biology: Tissues, Organs, and Systems of Living Things: evaluate the importance of medical and other technological developments related to systems biology, and analyse their societal and ethical implications; investigate cell division, cell specialization, organs, and systems in animals and plants, using research and inquiry skills, including various laboratory techniques; demonstrate an understanding of the hierarchical organization of cells, from tissues to organs, to systems in animals and plants

Chemistry: Chemical Reactions: analyse a variety of safety and environmental issues associated with chemical reactions, including the ways in which chemical reactions including the ways in which chemical reactions can be applied to address environmental challenges; investigate through inquiry the characteristics of chemical reactions; demonstrate an understanding of the general principles of chemical reactions and various ways to represent them

Earth and Space Science: Climate Change: analyse the effects of climate change around the world, and assess the effectiveness of initiatives that attempt to address the issue of climate change; investigate the various natural and human factors that influence Earth's climate and climate change; understand natural and human factors including the greenhouse effect, that influence Earth's climate and contribute to climate change.

Physics: Light and Geometric Optics: evaluate the effectiveness of technological devices and procedures designed to make use of light, assess their social benefits; investigate the properties of light, predict its behaviour, with respect to reflection in plane and curved mirrors and refraction in converging lenses; understand the characteristics and properties of light, including reflection in mirrors and reflection/refraction in lenses.

Course Resources: mrbaxtersacredheart.com contains digital copies of all work and answer sheets as well as key dates throughout the semester.

Catholic Graduate Expectations: Our goal for all students is to experience an education based on our Catholic Graduate Expectations. **(**http://www.iceont.ca) We work in community to develop graduates that are:

- Discerning Believers Formed in the Catholic Faith Community
- Effective Communicators
- Reflective and Creative Thinkers
- Self-Directed, Responsible, Life-Long Learners
- Collaborative Contributors
- Caring Family Members
- Responsible Citizens

Assessment, Evaluation and Reporting: The primary purpose of assessment and evaluation is to improve student learning. Students will understand what is expected of them, using learning goals, and success criteria, based on the overall expectations. Feedback (self, peer, teacher) supports learning, and plays a critical role in academic achievement and success.

The development of learning skills and work habits is a key indicator of future success. The following learning skills and work habits will be developed, assessed, and reported during this course:

1.	Responsibility	fulfills responsibilities and commitments *(e.g. accepts and acts on feedback)*
2.	Organization	manages time to complete tasks and achieve goals *(e.g. meets goals, on time)*
3.	Independent work	uses class time appropriately to complete tasks *(e.g. monitors own learning)*
4.	Collaboration	works with others, promotes critical thinking *(e.g. provides feedback to peers)*
5.	Initiative	demonstrates curiosity and an interest in learning *(e.g. sets high goals)*
6.	Self-Regulation	sets goals, monitors progress towards achieving goals *(e.g. sets, reflects goals)*

Group work supports collaboration, an important 21st century skill. This will be assessed only as a learning skill. Homework may also be assessed as a learning skill. Evaluation completed in class will be based only on individual student work. Regular attendance is important to support group work, various forms of feedback, and to allow students to demonstrate evidence of their learning. Students are responsible for providing evidence of their own learning (with references where required), in class, within given timelines. Next steps in response to academic integrity issues, such as lack of work completion, plagiarism, or other forms of cheating, range from providing alternate opportunities, to a deduction of marks.

The achievement chart identifies four levels, based on achievement of the overall expectations:

Level 1	achievement falls below the provincial standard	(50-59%)
Level 2	achievement approaches the provincial standard	(60-69%)
Level 3	achievement is at the provincial standard	(70-79%)
Level 4	achievement surpasses the provincial standard	(80-100%)

The report card grade will be based on evidence of student performance, including observations, conversations and student products. Consideration will be given to more recent evidence (skill development) and the most consistent level of achievement.

Mark Breakdown:

Term Work (65%) will include a variety of assessment tasks designed to demonstrate students' development in their knowledge and understanding, thinking and inquiry, communication and application, of all overall expectations.

Attendance and Participation (15%) - see more information here

Final Evaluation (20%) takes place towards the end of the semester, is completed in class, and provides the final opportunity for students to demonstrate what they know and the skills they have learned, based on the overall expectations. In SNC2D, the summative evaluation will consist of a final written exam (20%).

Awarding of Course Credit: Students who demonstrate evidence of achievement of overall expectations, ***and*** earn a mark of 50% or greater, will earn one credit for the course with the following exception: Students who do not attempt the summative evaluation (exam and/or culminating task) will not earn their credit regardless of their mark.

Student and Parent/Guardian Acknowledgement

We have read the above course outline and are aware of the student responsibilities to attend class on a regular basis and to provide evidence of learning within the established timelines.

Student's Name (print): _____ Student's Signature: _____

Parent/Guardian Name (print):_____ Parent/Guardian Signature: _____