

MCCREARY SCHOOL
COURSE OUTLINE 2025
Science 20F
Course: 1 credit
Teacher: Mr. Podaima

Prerequisites: Grade 9 Science 10F

Required Materials and Recommended Resources:

Students require a binder, pencils, eraser, lined paper, and calculator.

Textbook: Grade 10 Science (Manitoba) McGraw and Hill Ryerson

Internet and other resources to be used as supplementary material.

Course Description and Goals

Science 20 F is the follow up course to Science 10F, Science 20 F is designed to expose students to the 3 main branches of Science: chemistry, physics, and biology through a combination of lectures and hands-on activities. This allows students to choose a science elective at the 30S/40S level that suits their interest. This course is mandatory as it is a prerequisite for further science courses.

Goals of the Course

1. To encourage students to develop a critical sense of wonder and curiosity about scientific and technological advances.
2. To acquire new knowledge and solve problems, so that they may improve the quality of their own lives.
3. To prepare students to critically address science related societal, economic, ethical, and environmental issues.
4. To prepare students with a proficiency in science that prepares more opportunities for them.
5. To develop an interest and knowledge of the wide variety of careers related to science.

Science 20F comprises the following 4 units:

- 1. Chemistry in Action (Chemistry)**
- 2. Dynamics of Ecosystems (Biology)**
- 3. In Motion (Physics)**
- 4. Weather Dynamics**

Chapter1: Ecosystem Dynamics and Sustainability

Chapter 2: Shifting Perspectives on Ecosystems

Chapter 3: Chemical Names, Formulas, and Equations

Chapter 4: Chemical Reactions and Their Applications

Chapter 5: The Nature of Speed

Chapter 6: The Physics of Collisions

Chapter 7: Inquiring about Weather

Chapter 8: Weather, Climate Change, and Society

Student Evaluation:

Tests and Assignments 70%

Final Exam 30%

Classroom Expectations

Homework: You won't have homework every night, but when it is assigned, it is expected to be completed on time. Homework checks are done regularly to assess whether you (the student) have tried each of the questions in the assignment.

Absent: If you are absent, please connect with me to find out what you missed. You are also responsible for making up all missed work. If you have an excused absence on the day of a test, please make arrangements to write it when you return.

Extra Help: Extra help will always be available when you need it. I am generally available before and after school, as well as at lunch hour. Please make arrangements

with me if this is something you are needing. Technology in the Classroom: No personal devices will be permitted at any time.

Academic Dishonesty: Academic dishonesty, including, but not limited to inappropriate collaboration, plagiarism, and cheating is a severe offence and will be dealt with according to the policy outlined in the school handbook.

Late Policy: Incomplete work and late assignments may be deducted in marks, as per McCreary School's late policy, developed in accordance with the Assessment Policy.

Final Exams: All students are expected to write the final exam on the scheduled day!