



# Science 20

Course Outline & Syllabus

Teacher: Mrs. L. Fisk

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Classroom: #161

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## Course Overview

Science 20 consists of four units of study:

### **D. Changes in Living Systems (Approx. 5 weeks)**

**Overview:** Matter cycles and energy dissipates through the biosphere and its component ecosystems. Students will study ecosystems, habitat destruction, ecological succession and changes to populations, focusing on the need to balance the interests of a growing human population with sustainable ecosystems. This will include a field trip to Elkwater.

### **C. The Changing Earth (Approx. 4 weeks)**

**Overview:** The history of our planet is one of change. In this unit, students examine scientific evidence for natural causes of climate change, for changing life forms and for continual changes to the Earth's surface.

### **A. Chemical Changes (Approx. 5 weeks)**

**Overview:** Chemical changes involve a change in energy. Students will learn how numerous useful materials are produced, by developing an understanding of concentrations of aqueous solutions, oxidation-reduction (redox) processes and the characteristics of hydrocarbons.

### **B. Changes in Motion (Approx. 3 weeks)**

**Overview:** Motion is an important aspect of our lives, and the understanding of the effects of force on motion has many technological applications. In this unit, students investigate the concepts of displacement, velocity, acceleration, force, momentum and mechanical energy and consider the relationships among them.

**General Outcomes:** Students will be encouraged to develop positive attitudes that support the responsible acquisition and application of knowledge related to science and technology. Students will be encouraged to show interest in science-related questions and issues and confidently pursue personal interests and career possibilities within science-related fields. Students will be encouraged to appreciate that scientific understanding evolves from the interaction of ideas involving people with different views and backgrounds.

## **Required Supplies**

- Textbook ("Science 20" by Alberta Education)
- Binder with lined paper

## **Expectations**

Science 20 is an intensive course because of the volume of material covered. Maintaining organized notes and managing your time effectively is a necessity. Key concepts will be covered in class, however it is expected that you spend some time reading, reviewing, or working on homework in order to understand and keep up. Inattentiveness, poor attendance, and lack of studying will result in difficulty with course content.

In the event that you have an excused absence, **you are responsible** to find out what you missed and make up any missed assignments in a timely manner.

## Evaluation

Your final mark for Science 20 is a combination of *class work* (75%) and your *final exam mark* (25%). Weighting for your class work is as follows:

Science 20 Evaluation:	
Task Weighting	
Formative	
Assignments	10%
Quizzes	20%
Labs and Major projects	20%
Unit Exam	50%
Final Exam	25%

## COURSE EXPECTATIONS AND MY PROMISE TO YOU:

- Students are to follow all school policy and procedures in class.

**\*\*We are making a distraction-free learning environment. No personal mobile devices are to come to class.\*\***

1. Everybody learns differently and different rates. Try your hardest, ask for help, and I will promise you pass this course.
2. Treat your peers, this building, yourself, and your teachers with respect.
3. No putting other students down. Making derogatory remarks of any kind towards others, or any form of profanity is prohibited.
4. Bullying or any type of harassment is absolutely prohibited and will be dealt with by administration immediately.
5. Keep your class clean buy throwing your garbage away and placing recycling in the proper place (NOT the garbage!).
6. Plagiarism and cheating will not be tolerated.
7. Assignments are due at the beginning of class. **Thursdays 3:30 for TAG FLEX cut off!**
8. **Tests and quizzes must be written within a reasonable time of the class writing** and can be done during TAG or lunch.
9. **It is the student's responsibility to catch up on missed work/quizzes/tests.** TAG /Lunch detentions may be assigned for those missing critical assessment items.
10. It is the student's responsibility to follow all safety precautions and rules when performing experiments and labs.
11. Consequences for not following classroom expectations and performance in class will result in: (1) warnings, (2) detentions, (3) completion of an action plan with a phone call home, (4) Involvement of counselors and administration, and (5) a parent meeting, not necessarily in this order, depending on the seriousness of the situation.

## Teacher Contact

- Students are encouraged to speak with Ms. Rief about any questions. My door/email/phone is always open for you!!
- PLEASE come for help during TAG or make an appointment after school!
- Parents and students may obtain student records for Science 20 through *PowerSchool* and may contact Ms. Rief regularly through email or through the office.



