



J.A. WILLIAMS HIGH SCHOOL

Course Outline

Science 10

Instructor's Name: Matthew Dyck

School's Phone Number: 623-4271

Instructor's e-mail address: matthew.dyck@nlsd.ab.ca

Note to parents: The preferred method of communication is e-mail. If you need to phone, please do not hesitate to call the school during school hours. If your e-mail address with the school is not current, please send me an e-mail from your preferred e-mail account.

RESOURCES

1. Addison Wesley Science 10 (supplied by school)
2. Safety equipment and laboratory apparatus (supplied by school)
3. Miscellaneous materials (supplied by student)
 - a. Calculator.
 - b. HB pencils and pens.
 - c. Binder, complete with loose leaf.

COURSE OBJECTIVES

Science 10 is an academic course which is intended to introduce you to several new concepts in the fields of chemistry, physics, biology, and ecology. Your previous understanding of key topics including chemical change, motion and forces, cellular anatomy, and ecological change will be expanded greatly

OVERVIEW OF CONTENT

- 1.) Energy and Matter in Chemical Change (September-October)
- 2.) Energy Flow in Technological Systems (October-November)
- 3.) Cycling of Matter in Living Systems (November-December)
- 4.) Energy Flow in Global Systems (December-January)

A more detailed overview of the outcomes specifically addressed in each unit is included in the program of studies that can be found on the Alberta Education website @ <http://education.alberta.ca/media/654833/science10.pdf> . Please note that the timeline above is only an approximation.

COURSE EVALUATION

(Criteria and Value)

- 1.) **Energy and Matter in Chemical Change – 18.8%**
 - a. Assignments and Laboratory Exercises – 7.5%
 - b. Unit Examination – 11.3%
- 2.) **Energy Flow in Technological Systems – 18.8%**
 - a. Assignments and Laboratory Exercises – 7.5%
 - b. Unit Examination – 11.3%
- 3.) **Cycling of Matter in Living Systems – 18.7%**
 - a. Assignments and Laboratory Exercises – 7.5%
 - b. Unit Examination – 11.2%
- 4.) **Energy Flow in Global Systems – 18.7%**
 - a. Assignments and Laboratory Exercises – 7.5%
 - b. Unit Examination – 11.2%
- 5.) **Final Examination – 25%**
- 6.) **Formative Assessments – 0%**

MARKING / INSTRUCTIONAL PHILOSOPHY

Welcome everyone. I hope that we will have a great year with lots of learning taking place and maybe having some fun as we go along. I invite students and parents to please contact me with any questions and concerns.

I believe that marks should not be the sole purpose of taking a class. If students concentrate on the concepts and learn to the best of their ability, they will perform well on the assessments and receive marks indicative of their level of competency in the cours.

Classes will consist of lectures, discussions, formative assessments and summative assessments. Assessments can be assignments/quizzes (Concept Checks), exams, labs and discussions.

Formative assessments are used to help students identify concepts that need more work so that they can correct any errors. These assessments help them form their knowledge and skills.

Summative assessments are used for grading purposes. Students will be assigned marks based on their achievement on these assessments.

If you miss a unit exam you may be eligible for a rewrite. Rewrites for unit exams will be during our zero days, November 9, December 20 and January 21 or at the teachers discretion. Exams that have occurred between zero days will be eligible. For example, a unit 3 exam is written on December 5. It will be eligible for a rewrite only on December 20 and no other time.

ISSUES SPECIFIC TO COURSE

1. Safety Concerns

- a. Being that a reasonable amount of time will be spent performing laboratory experiments, it stands to reason that safety precautions must be followed. Any students who choose not to follow the proper protocol will be excused from class immediately and will not be given the chance to perform the lab activity. We will be working with concentrated acids and bases, not to mention explosive and flammable substances. As such, all students are expected to behave responsibly in the laboratory setting.
- b. Students are also required to wear proper attire in the laboratory. Long hair should be tied back, and *safety goggles must be worn at all times*, even by students who wear glasses. Open-toed shoes and baggy clothing are unacceptable; as such, any students dressed in this manner will not be permitted to perform experiments.

2. Other Expectations

- a. Students are expected to be punctual in both attendance and completing formative and summative assessments. If you require additional time for an assignment, please provide your teacher with as much notice as possible so accommodations can be made.
- b. Although cell phones are wonderful pieces of technology, considering their ability to play music, games, and send text messages, they are *not* to be a distraction during class. The teacher has the right to confiscate the device, and repeat offenders will be dealt with by the administration.
- c. The classroom climate is to be one of mutual respect and courtesy. Rude, inconsiderate, racist, or homophobic comments will not be tolerated.
- d. Students must ensure that they exercise due diligence in their studies. In-class work is to be completed at home if it is not completed during the scheduled block of instruction. Should you encounter difficulties, please contact your teacher *promptly*. Legibility is a virtue, so please ensure that others (namely, your teacher) can read your work.