

2020 Science 10 Course Outline

Neil Sandham

email: nsandham@rvschools.ab.ca

Course Website: classroom.google.com • Text: Science Focus 10

Course Overview and Outcomes

Science 10 will be presented in four units:

Unit A: Energy and Matter in Chemical Change - 8 Outcomes (approx. 35% class time) <ol style="list-style-type: none">particle model of matterWHMIS symbols, pure substances, mixtures and solutionsreactants, products, conservation of mass, periodic table, elements, compounds, atomic theory, chemical nomenclatureacids and bases	Unit C: Cycling of Matter in Living Systems 5 outcomes (approx. 20% class time) <ol style="list-style-type: none">life processes, and structure of plantsorganisms, cells, system organs, tissues
Unit B: Energy Flow in Technological Systems - 7 Outcomes (approx. 30% class time) <ol style="list-style-type: none">heat energy needs and technologies, thermal energy, heat transfer, energy conservationforces on and within structures, direction of forcestransmission of force and motion, simple machines, measurement of work in joulesforms of energy, energy transformation, renewable and nonrenewable energy	Unit D: Energy Flow in Global Systems - 3 Outcomes- (approx. 15% class time) <ol style="list-style-type: none">environmental monitoring, environmental impacts, energy flow, environmental managementthermal energy, change of state, heat transferclimate, glaciers and icecapsbiological diversity, habitat diversity

Evaluation

As with Grade 9, Science 10 will use Outcomes Based Assessment this year. Assessment of each outcome will be based on homework, class assignments, projects, quizzes, unit exams and the final exam. Each outcome is assessed numerous times and the three most recent assessments will be used in reporting. Evidence of the student meeting each outcome will be assessed appropriately for each individual outcome. For example, an outcome relating to the history of the atomic model will be assessed in a project, while an outcome involving naming chemical compounds will be assessed through assignments and quizzes.

Students will be assessed on 25 different outcomes (8 Chemistry, 7 Physics, 5 Biology, 3 Environmental and 2 Skill). Each outcome is weighted evenly in the student's overall grade. Student understanding of each individual outcome will be assessed on the following scale:

Mastering	Advancing	Progressing	Emerging	Beginning	Limited	Not Met
Can apply the learning to complex tasks independently.	Can apply learning to increasingly difficult tasks.	Can apply the learning to moderately challenging tasks with some support.	Can apply the learning to basic tasks with support.	Can apply the learning to simple tasks with direction.	Can not yet apply learning to simple tasks. Extensive support required.	Not enough evidence to show achievement of outcome.
90-100%	80-89%	70-79%	60-69%	50-59%	40-49%	< 40%

If a student is not satisfied with their achievement on the scale, they will have the opportunity to be assessed again if they can present evidence that they have attempted to improve their understanding of that outcome. What qualifies as sufficient evidence will be determined by the teacher. Examples of sufficient evidence may include the completion of previously incomplete assignment, a conversation with teacher about outcome, amendments of errors in previous work and/or

demonstration of incorporated feedback. If sufficient evidence is not presented, students will not be permitted to have the outcome reassessed. Scheduled class activities and assessments will take priority over outcome reassessment.

Required Materials - to bring to EVERY class

- pens, pencils, and erasers
- physical and access to online materials (Moodle/PS/etc)
- Personally Owned Device (computer/tablet) **with a charger!**
- scientific calculator
- binder for handouts, notes, and practical exercises (organizational skills!)
- headphones (for watching videos, etc)
- some textbooks can be signed out at the office if students would like their own copy, but a digital version may be available online.

Course Expectations

Student Expectations

- All students are to be mature and respectful of each other, the teacher, classrooms and the lab.
- Students are expected to maintain a clean and tidy classroom and lab station.
- Take responsibility for your own learning! Please ask questions and seek extra help if you do not understand. I am here to help you succeed! If I don't know you need help, I can't help you.
- When you're in class, be in class. Focus on the subject and learn what you can in the time we have.
- Be accountable for your own actions; mistakes happen and we can all learn from them! Please don't hide mistakes or poor choices. We will work through them and you will have more respect for yourself and from me.

Attendance: ALL classes are important! Whether we are doing a lesson, activity, project, quiz, test, or review, every missed class is a missed opportunity to learn and will result in students catching up on their own time. Please tell me in advance of an upcoming absence whenever possible and arrange a time to meet prior to this absence in order to stay on top of material. With the exception of an illness documented by the office, students who miss class and do not inform me ahead of time will be expected to catch up on their own. Arriving late for class is disrespectful to others and detrimental to your own learning.

All work done in the course is both important and relevant, failure to complete ALL assignments may result in the student not obtaining and demonstrating Learning Outcomes as outlined by Alberta Education thereby potentially receiving an indicator of NM (or Not Met) as their overall achievement of learning outcomes.

Online Course Access: It is expected that all students are aware of due dates, test dates, and daily assigned work. To facilitate this, my teacher page on the W.H. Croxford website as well as the Google Classroom (classroom.google.com) will have all of this information shown on a calendar, digital and/or physical. Students should access the Google Classroom, School calendar, PowerSchool and school Gmail **EVERY DAY**.

Use of Class Time: Students are expected to be ready to work when class begins, to use all class time effectively, and to complete any unfinished work on their own time during focus or at home. All assigned work is relevant and important, and practice is needed to become proficient. *All assignments must be completed.*

Extra Help/Focus: Any student who would like individual assistance should see me to book a time to come for help before or after school. Individual assistance will be provided to any student who shows a good work ethic and who uses class time effectively.

Homework: Any work not completed in class must be done outside of class time. Students are required to complete all assigned work. Work should be submitted on the due date. Late submissions may not be accepted after they have been marked and returned to students. An alternative assignment may be given to make up the missing grade.

Missing Quizzes and Tests: Students must write all quizzes and tests. Students who miss a quiz or test will receive a mark of "NM" (or Not Met) for those learner outcomes, unless I have been notified in advance or the absence is excused through the office. When necessary, quizzes/tests can be made up on a case-by-case basis.

Technology Guidelines:

- Phones should never make noise – place them in silent mode in class.
- When anyone is speaking to the class (teaching, discussions, giving instructions, etc.), phones or tablets should be away or put facedown and computers should be closed.
- Headphones are ok to listen to music during “work times” (**ask if you’re not sure**) but never when anyone is speaking to the class.
- When you have instructions to use a certain device, application, or program, they should be followed. At that time, devices should not be used for any other purpose.
- During work times, devices can be used to access information in any form that will help your understanding.
- If you are going to watch a video, you must use headphones.
- Use maturity and common sense when making decisions about the use of a tech device. The line between a productive use and a distracting use is pretty clear.
- Pictures and videos are NOT permitted to be taken during class without the express permission of all those in the video/picture AND the teacher due to issues of confidentiality and privacy. Students taking videos/pictures may be asked to erase the video and have it confirmed by the teacher and/or have their device temporarily taken away.

Late/Missing assignments

Assignments must be submitted on or before their due date. Late assignments will show as a zero or NM in powerschool. **It is the students’ responsibility to complete work on time.**

Once an assignment has been returned to the class, a late submission will be recorded as a checkmark in powerschool.

Should the assignment still be outstanding 3 school days after the due date, or after the assignment has been returned to the rest of the class (whichever comes first), the following steps may occur:

- Students **MUST** meet with the teacher to create a plan for completing the outstanding work over a mutually agreed upon time frame.
- Students may--at the teacher’s discretion--discuss the option of having the opportunity to re-do assignments or parts thereof in order to show understanding of the material.
- Students may complete an alternate assignment either of the teacher’s design or the student’s (with teacher approval). These assignments may be used as “re-do’s” or as a completion mark, dependent on the task/teacher discretion. It may be possible to replace a completion mark with an alternate or replacement assignment at a later date, dependent on the circumstances.
- **The timeline for the return/grading of late work does NOT take precedence over more recent assignments-- they will be addressed at the earliest convenience of the teacher.**

Should these options prove unsuccessful:

- The student, teacher, and parent/guardian of the student will arrange a meeting to discuss a strategy for completing the outstanding assignment(s).
- Administration may be brought in to help discuss alternate arrangements in terms of the student’s timetable/schedule in order to help the student succeed.

Appeals: Lines of communications to appeal are as follows:

- 1) Student/teacher 2) Student/parent/teacher 3) Student/parent/teacher/learning lead

Plagiarism

Plagiarism of any kind will not be tolerated. If you are unsure if you are committing plagiarism, see your teacher!

Incidents of plagiarism will be dealt with by the teacher, learning leads and administration (if needed). Breach of academic integrity can result in a grade of zero. This includes allowing others to plagiarize your work.

If you have any questions or concerns about this class, please don’t hesitate to contact me!

Mr. Neil Sandham

nsandham@rockyview.ab.ca

ph: 587.775.3521 ext: 7897