Science 10 Course Outline

Welcome to Mrs. Pereira’s Class!

Website: blogs.sd41.bc.ca/pereirav

Materials:

* Science Probe 10 Textbook
  + Also available online at: BCscience.com/bc10/
    - User name: BC41, Password: PZ41
* Student Workbook
  + Cost: $10
  + If you choose not to purchase your own, you will be issued one on your textbook card, but will not be allowed to write in it.
* Coiled notebook
  + This will be used as your interactive Science notebook / Journal
  + If you choose not to purchase one, you will need to construct one using loose leaf paper and a cover page.
* Binder
* Provincial Learning Outcomes Checklists (provided in class)
* Your phone camera, if you have one (to capture evidence of learning – more on that later)
* Memory stick (optional)

What will we be learning about this year?

See your Prescribed Learning Outcomes checklist booklet, which will be kept in the classroom. It contains all the topics the provincial government has outlined as required learning for this course.

The Flipped Classroom

As often as possible, I will be uploading my lessons as videos (about 15 minutes) for you to view as homework. This will free up class time for learning activities that allow you to

* use the information in a variety of ways and assess your own understanding
* think about and adjust your learning approaches
* ask questions
* discuss concepts to make them clearer.

What to Expect:

* To watch video lessons for homework **BEFORE** you come to class.
* Opportunities in class to **practice** using information
* Frequent **opportunities** **to reflect upon, and assess your own learning**.
  + Self-assessment (Do I get it?) includes:
    - Checkpoints
    - Whiteboards
    - Peer to peer interaction
    - Journal
    - By making your own notes
* To try new and more meaningful ways of learning in the classroom.
  + This year I will be shifting my teaching approach to something called the “Flipped Classroom”, which involves more student centred learning and standard-based grading (more on that later).
  + As I learn and reflect on this strategy, I will be making adjustments. Please be patient. I am learning too!

Expectations:

* **Be completely “present”** during class time. Use of technology as directed and peer learning are encouraged, but using technology to socialize is not appropriate. You are not “present” if you are texting your friend.
* **Make efficient use of class time** to
  + Spend quality time alone with the information you need to learn so that you can
    - Learn it in your own personal way
    - Think about your own learning strategies
    - Assess your learning strategies
    - Change and adjust your learning strategies.
  + Work together to help each other learn
* **Gather evidence of your learning** through formative assessment:
  + Checkpoints
  + Journaling
  + Whiteboard activities (you may need to photograph these to have a permanent record)
  + Lab write ups
* **Adequately prepare for tests** (summative assessments)
  + We are aiming for mastery level. This means 70% or higher.
  + Before test day, you will join Mrs. P for a **“hotseat” assessment** of whether or not you have adequately prepared for the test. If you cannot produce evidence that you adequately spent time with and learned the information, your test will be delayed (see test rewrite policy below). What’s the point of writing a test if you are not ready?
  + Tests and quizes will account for 100% of your mark. Everything else is practice. This mark will be your mark regardless of how you did on checkpoints. Here’s why: It provides evidence for your **latest understanding** of the topic.

**You are in control of your learning** **and can achieve great things with an honest effort.**

Standard-Based Grading

A **standard-based assessment system** for grading will be used. Rather than using a point system to record scores on various assignments, quizzes and tests, you will demonstrate your level of understanding of various learning goals or standards (see package of prescribed learning outcomes).

How it Works:

Rather than a point system to record scores of various assignments, quizzes and tests, **you must demonstrate your level of mastery on various learning goals or standards.**

**Example**: Instead of getting one grade for a quiz (such as 83% or 78%) that may cover many topics, you will be scored on individual learning goals such as “I can distinguish between paired and unpaired electrons for a single atom.” (This is Learning Outcome C1.4.)

Evidence of the Latest Learning

Science is a cumulative learning experience. Units build upon previous topics. This means you can demonstrate mastery on earlier goals. Unfortunately, it also means you can demonstrate that you have **forgotten** earlier information. If this regrettable situations occurs, your score on that particular goal will **fall**. Mastery means that you have a deep understanding and should be able to **demonstrate it** **repeatedly**.

Throughout the course, **evidence of latest learning** will be used.

Scale for Standard-Based Grading

|  |  |
| --- | --- |
| Level | Descriptors |
| Mastery  (M)  “Yes, exactly!” | ***I could be a peer teacher. I have high confidence in how to do this skill and can explain the standard to another student. I can have a conversation about this concept or create something new with it.***  I can:   * Clearly draw a diagram and multiple representations that accurately represent the learning standard. * Write detailed prose to demonstrate understanding that is grammatically and scientifically accurate. * Apply concepts to new unknown situations. * Identify and create unique connections and differences between concepts. |
| Progressing  (P)  “on my way” | ***I have confidence in how to complete this skill on my own, some of the time, but I need to continue some parts that are still giving me problems.***  ***I need my handouts, notes or teacher assistance once in a while.***  I can   * Create answers to the “I can” statements that are a mix of understanding and memorized words and phrases * Can make limited connections among concepts, but usually only the ones discussed in class |
| Starting  (S)  “needs support” | My response shows I do not understand the concept or skills.  ***I need help from my peers or teacher to do this standard correctly and I do not feel confident enough to do this skill on my own. I need my handouts and notes most of the time.***  I can   * Create answers that show a limited understanding or partial knowledge of concepts. * Communicate understanding in an unclear or confusing manner. |
| No evidence  (N) | I do not provide a response to show my level of understanding.  I cannot provide evidence to show what I know / can do.  OR  Evidence is lacking due to absences or non-completion of assignments. |

Adapted from Sam Evans, Kelly Oshea, Terry Elbert and Brian Bennett via Carolyn Durley

How Grades Will Be Determined

In-Class Assessment

You will show off your mastery level of standards on quizzes (10 minutes) or tests (most of the class time), depending on what is appropriate.

For each learning outcome on the test or quiz, your **level of understanding** will be assessed using the following scale:

1. No evidence
2. Starting
3. Progressing
4. Mastery

Term Grades

Near the end of term, you will meet with me individually to discuss your progress and to assign a formal grade. We will look over all that you have learned and a **cumulative** grade will be given as follows.

|  |  |  |
| --- | --- | --- |
| Grade | Core Standards | Advanced Goals |
| I | Progressing | Starting or No Evidence |
| 60 C | Progressing / Mastery | Starting or No Evidence |
| 70 C+ | Mastery | Starting or No Evidence |
| 75 B | Mastery | Progressing |
| 86 A | Mastery | Progressing / Mastery |
| 95 A | Mastery | Mastery |
| 100 A | Mastery in all standards and synthesis of ideas to new situations\*\* |  |

How to Get 100% for the Term:

* Meet all standards **and**
  + Demonstrate full understanding of multiple skills by thorough and clearly explaining my thinking with no errors
  + Demonstrate understanding in multiple ways (math, prose, graphs, diagrams, etc.)
  + Apply this understanding in a new scenario or make connections to other knowledge

Final Grades

* Class mark: 80%
* Final Provincial Exam\*: 20% (\*http://www.bced.gov.bc.ca/exams/specs/grade10/science/2011.htm)
* Total: 100%

**The bottom line message: You are in control of your own learning. You can achieve 70% or better. You will need to be strategic, focused and make good use of your time**.

Test Rewrites:

There will be an opportunity every week for you to apply for an extra assessment to show your understanding of the skills of your choosing if circumstances:

* You did poorly on a test and want to improve your mark.
* You were not adequately prepared (you did not demonstrate adequate understanding of the concepts).
* You missed a test due to an excused absence.

To qualify for one of these extra tests, you need to do the following:

1. Make corrections to your old assessments
2. Do extra practice on the relevant skills
3. Apply for the extra test by filling out the application form\*. This must be done by each Tuesday. Extra tests will be given on Thursdays.

**Important Things to Remember.**

* **Outside of class assessment is a privilege. Take care to answer the application questions seriously and specifically. You may be asked to give more specific details if your application is unclear.**
* **On any test, including that you ask to take, your standing can go up or down! The mark you score on the rewrite will become your mark for the provincial learning outcomes tested. It is evidence of your latest learning and therefore the most accurate assessment of your understanding. Unfortunately, this means that if you score lower than on the test you wrote the first time, the lower mark will become your mark. Be serious about your learning. Be prepared.**

Policies for Test Re-writes:

1. One outside of class assessment per week for up to 2 units.
2. You must know exactly which Learning Outcomes you would like to attempt.
3. You must have evidence showing how you prepared for the reassessment.
4. An attempt is a “testing situation” and must be taken seriously.
5. All assessments are subject to teacher’s discretion.
6. Outside of class assessments are not allowed within one week of the end of term. See term end dates in student planner.

**CONSIDER THE FOLLOWING: Out of class assessments (rewrites) use up your time. A more time efficient strategy is to prepare adequately for the in-class assessments.**

Test rewrite application form: