

COURSE DESCRIPTION: This is a conceptual course requiring a solid mathematics background and good problem solving abilities.

COURSE EXPECTATIONS: Students are expected to maintain the necessary work habits in order to adhere to the course schedule. It is the student's responsibility to seek help during class or, by prior arrangement, outside of class time.

More details about the course curriculum can be found at: https://curriculum.gov.bc.ca/curriculum/science/12/physics

Students are responsible for work missed due to absence. Extra help with missed material will be available <u>after</u> the student has <u>obtained and attempted</u> the missed material.

Lunch-hour as well as after-school tutoring will be available upon arrangement.

COURSE EVALUATION:

- 1. Test topics and dates will be announced in advance. Students are encouraged to make an arrangement with their teacher to write the missed test as soon as they return to school after their excused absence.
- 2. Quizzes will NOT be announced in advance. There will NOT be an opportunity to "make up" a missed quiz. A grade of zero will be scored for a quiz missed due to lateness or unexcused absence. A student with an excused absence on the day of the quiz will not be penalized. Quizzes will be solely based on material presented in class or assigned homework. Students, who did not miss any quizzes due to lateness or unexcused absence, will have a choice of dropping three quizzes with the lowest grade at the end of the semester.
- 3. Assignments (pre-lab exercises, lab reports, projects, in-class assignments) will be checked regularly, and may be collected without prior notice. It is expected any student will demonstrate the steps leading to their answer in all work. Unsubstantiated work will not be credited as the process leading to an answer is often more valuable than the answer itself.
- 4. Attendance and behavior expectations for quizzes and tests are the same as the school's expectations of students for final exams. No phones in sight.
- **5.** Copying other's work, enabling others to copy one's work, and using unauthorized material during quizzes and tests is considered plagiarism. Plagiarism is a sever offence and it will be taken into consideration during student's evaluation.

- **6.** Students are expected to <u>clearly identify all the resources and references</u> they use to complete any given project or assignment.
- 7. *Conversations among peers and with a teacher are essential components of assessment and evaluation. Peer talks and small group and whole-class discussions will be used to determine the level of understanding, to emphasize connections with already known and mastered material, and to allow students multiple opportunities to communicate their understanding and to voice their questions in a safe environment.
- **8.** *Students' ability to work independently, to effectively and respectfully cooperate with others, to assess their own work and the work of their peers, to set goals, and to plan strategies to achieve the goals will be observed, assessed and evaluated.

CALCULATION OF CLASS WORK MARK:

| Tests | 25.0% |
|--|--------|
| Labs and projects | 20.0% |
| Quizzes | 25.0% |
| Assignments and classroom participation* | 30.0% |
| Total | 100.0% |

FINAL MARK - School-based final exam

| Class work | 80.0% |
|------------|--------|
| Final Exam | 20.0% |
| Total | 100.0% |

RESOURCES:

Textbook – Physics 8e (Cutnell & Johnson) and Physics: Principles and Problems (Zitzewitz et al.) Web – The Physics Classroom – www.physicsclassroom.com
Worksheets and handouts
Science articles when applicable

PHYSICS 12 COURSE TIME-LINE

| Month | Topic |
|----------|--|
| January | Review of math for physics, including vectors. |
| | Review of Kinematics. |
| February | Review of Dynamics. |
| | Objects on Inclined Planes. |
| | Momentum and Impulse. |
| March | Torque. |
| | Static Equilibrium. |
| | Theory of Relativity. |
| April | Circular Motion and Gravitation. |
| | Gravitational Potential Energy. |
| | Electric Charge and Field. |
| May | Electric Potential. |
| | DC Circuits Review. |
| | Magnetism. |
| June | Electromagnetic Induction. |
| | Exam Review |

The Final Exam will be during the scheduled PCSS exam week in June, 2021. It is the student's responsibility to be familiar with the published exam schedule.

GENERAL EXPECTATIONS:

Students are expected to show respect for their classmates by arriving to class prepared and on time. Cell-phones, laptops, i-pods, i-pods, i-pads and other electronic devices are not to be used by students while in class. Exceptions may be made on an individual basis and students may be granted permission to listen to <u>quiet</u> music during independent study/practice periods or use their electronic devices to conduct research.

This information sheet is to inform students and parents/guardians of the expectations for this course. Please sign and return. Thank you.

| Student Name: | Student Signature: |
|---------------------------------|---|
| Parent/Guardian Signature: | Date: |
| Please fill in 1. I am good at | |
| 2. At school, I am good at | You stay up late because you didn't do anything productive all day You don't do anything all day because you stayer up too late. (and you goofed around a little) Pull all-nighter. You don't do anything all day because you stayer up too late. You stay up even later to |
| 3. In math, I am good at | Asysahh I Crash make up for it |
| 4. In physics, I am good at | even later less done Reset |
| 5. I am most interested in | |

6. I usually have difficulty with

8. I am _____ at note-taking. 9. I am ______at reading assigned passages from a textbook, and extracting important information. 10. I am ______ at copying notes from the board. Please circle the expression(s) that most appropriately describes your attitude towards this course. I found physics 11 interesting but difficult. I love physics, it is my favourite subject. I am sure I will love physics 12 Other: too. I could not care less about physics 12 or any other course. I am taking this course because I was told to do so. I am curious to see if I like physics12. I am taking physics 12 just because I

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did not want to take any other course and I needed another credit.

7. I would appreciate help with