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COMMISSION SCOLAIRE WESTERN QUÉBEC SCHOOL BOARD

**VIRTUAL CAMPUS**

## Standards and Procedures for the 2025-2026 School Year

**Physics, Secondary 5**

Evaluation and Weighting of Competencies:

| | Term 1 (20%) | Term 2 (20%) | Term 3 (60%) |
|---|---|---|---|
| | Evaluation Methods and Tools | | |
| **Practical**<br>• Seeks answers or solutions to problems involving physics<br>• Communicates ideas relating to questions involving physics, using the languages associated with science and technology<br>(40%) | Hands-on and Virtual Labs (100%) | Hands-on and Virtual Labs (100%) | Hands-on and Virtual Labs (75%)<br>Lab Exam (25%) |
| **Theory**<br>• Makes the most of his/her knowledge of physics<br>• Communicates ideas relating to questions involving physics, using the languages associated with science and technology<br>(60%) | Unit Tests & Quizzes (~50%)<br>Assignments (~50%) | Unit Tests & Quizzes (~60%)<br>Assignments (~40%) | Unit Tests & Quizzes (35%)<br>Assignments (35%)<br>**Final Exam (30%)** |

### General Information regarding evaluation:

In addition to submitted assignments, tests, quizzes, and labs, students will be evaluated informally through class discussions and posts, as well as collaboration in group work during class.

Textbook: Quantum Physics

- WQSB Virtual Campus teachers provide instruction and evaluation for this course.
- The Virtual Campus respects the timetable for report cards identified by each school.
- Online students will write Theory and Practical exams in person according to the provincial schedule, where required by the local school.
- Supervision of tests will be provided by the local school.
- Students must complete their own work and complete evaluations independently. In cases of cheating:
    - First time, students involved will be given zero on the assignment/test with the opportunity to re-do assignment for maximum of 60%. School/family will be informed.
- Second time, students involved will be given zero and additional consequences.

Online Context: Self-Paced – 200 minutes in-school work including 30 minutes of live instruction

| PROGRESSION OF LEARNING (Compulsory Concepts) – PHYSICS |
|---|
| **Dynamics – Term 1**<br>– Newton's laws<br>– Free-body diagram<br>– Equilibrium and resultant of several forces<br>– Force of friction<br>– Gravitational force<br>– Centripetal force<br>– Gravitational acceleration |
| **Kinematics – Term 2**<br>– Reference systems<br>– Uniform rectilinear motion<br>• Relationship among position with respect to the point of origin, velocity and time<br>• Displacement and distance<br>– Uniformly accelerated rectilinear motion<br>• Relationship among acceleration, change in velocity and time<br>• Relationship among acceleration, distance and time<br>• Average velocity and instantaneous velocity<br>• Motion of a body on an inclined plane<br>• Free fall<br>– Motion of projectiles |
| **Transformation of energy – Term 3**<br>– Relationship among power, work and time<br>– Mechanical energy<br>– Hooke's law |
| **Geometric optics – Term 3**<br>– Snell's laws<br>• Reflection<br>- Incident and reflected rays<br>- Angle of incidence and reflection<br>• Refraction<br>- Incident and refracted rays<br>- Angle of incidence and refraction<br>- Index of refraction<br>– Images<br>• Type of image (real, virtual)<br>• Image characteristics (magnification, position) |