

# PHYSICS 122

Bonar Law Memorial School

2021–2022

Mr. B. Lynch

E-mail: bradley.lynch@nbed.nb.ca

## **TEXT and RESOURCES**

---

- Text: Physics, Edwards, L. (McGraw–Hill Ryerson), 2003.
- Pens/pencils, paper, eraser/liquid paper, ruler and protractor.
- Binder (daily work) and a Notebook or a duo–tang (assignments and laboratory data/reports)
- Scientific Calculator

## **SYLLABUS**

---

- **Introduction** – (one week)
  - Review of metric system, scientific notation, significant digits and graphing data.
- **Unit 1** – (five weeks)
  - Dynamics Extension
  - Vectors to Analyze: Force and Motion
  - Conservation of Momentum
  - Collisions in Two Dimensions
- **Unit 2** – (five weeks)
  - Projectiles
  - Circular Motion
  - Simple Harmonic Motion
  - Universal Gravitation
- **Unit 3** – (six weeks)
  - Magnetic, Electrical, and Gravitational Fields
  - Coulomb’s Law
  - Electric Circuits
  - Electromagnetism and Electromagnetic Induction

## **EVALUATION**

---

Your final grade will be based on the following scheme:

- |                          |             |
|--------------------------|-------------|
| • Semester Mark          | 70%         |
| • Final Exam (June 2022) | <u>30%</u>  |
|                          | <b>100%</b> |

**Semester mark** will be calculated based upon the following scheme:

- |  |  |
|--|--|
| • Tests and Quizzes<br>(1 quiz per week and 1 test every 2–3 weeks)                          | 80% (translates to 56% of final grade)   |
| • Assignments and Lab Reports<br>(1 assignment every 1–2 weeks and 1–2 lab reports per term) | 15% (translates to 10.5% of final grade) |
| • Homework   | 5% (translates to 3.5% of final grade)   |

Students must obtain a minimum mark of 60% to receive credit for this course.

**Please note:** According to the BLMS Exam Incentive, if you have earned a Semester mark > 85% in Physics 122, the final grade may also be computed by weighting the exam to be 15%, 30%, or 50%, and whichever scheme works in the student's favour will be recorded as the final grade.

### Absenteeism and Marks

A legitimate written excuse from a parent or guardian for illness or medical appointments will be required to circumvent the penalization of marks due to the lateness of an assignment or a test. See BLMS Assignment Tardiness Policy.

This course is academic in nature and is intended to prepare you for post-secondary studies that include the study of physics. There will be a significant amount of work assigned outside of class time. Students should be self-motivated and capable of independent work.

## **EXPECTATIONS**

---

- You are expected to be in class on time each day with all your materials.  
(these include: pen, pencil, paper, calculator and text)
- You are expected to treat others with respect and dignity. You are expected to contribute to a positive learning environment.
- You are expected to work the entire period to the best of your ability.
- This course will include in-class assignments (open book) that will be completed individually only during class time. Homework will also be assigned on a regular basis and students will be expected to have it completed at the beginning of each class.
- When you miss a class it is **your** responsibility to get caught up on your own time. This means you may have to call a classmate at home to receive the work missed or you may have to make arrangements to stay for extra help.
- If you miss a test or an in-class assignment you must write it when you return to school at a time arranged by the teacher.
- **ALL WORK** must be handed in and **ALL TESTS** must be written.
- If at **any** time a student is having difficulty, **extra help** is available upon request. Students are **always** welcome for extra help. I am available during lunch hour and after school.

\*\*\*\*\*

*If it moves... it's Biology.*

*If it stinks... it's Chemistry.*

*If it doesn't work... it's Physics!*

*~ The hardest thing to understand is why we can understand anything at all. ~  
- Albert Einstein*

