

MAC Science Department



Course: Physics 504

Teacher: Dr. Rossy

Room: 307

Science Competencies:

- 1) Practical - Seeks answers or solutions to scientific or technological problems 40%
- 2) Theory - Makes the most of his/her knowledge of science and technology 60%

Course Objectives:

- To examine some of the changes and behavior of matter and energy
- To prepare the student for coursework at the CEGEP study level.
- To practice good study and work skills - Organization and preparedness are essential -

Topics Covered:

Kinematics	Dynamics	Transformation of Energy	Geometric Optics
<ul style="list-style-type: none">• Reference systems and measurement• Vectors• Rectilinear motion• Accelerated motion• Projectile motion	<ul style="list-style-type: none">• Gravitational acceleration and force• Newton's laws• Force of friction• Centripetal force• Free-body diagrams• Equilibrium and resultant forces	<ul style="list-style-type: none">• Mechanical energy• Hooke's Law• Relationship between power, work, and time	<ul style="list-style-type: none">• Curved mirrors, lenses and their applications.• Snell's laws re: reflection and refraction.• Image formation and characteristics

Evaluation:

Evaluation is a continual process over the 3 terms of the school year.
Marks will be assigned for lab work, tests, exams and projects.
There are compulsory Mid-Year & End-of-Year exams.
Participation in the science fair is mandatory at Macdonald high school.

Please Note:** A 1 week notice is given for unit tests. If a student is absent for a test, they are **required** to present a parental **note** acknowledging the fact that a test was missed upon their return to class. As well, the student is expected to make up the test **on that first day back. Failing to do so will result in a mark of 0.

Required Materials:

3 ring binder, lined loose-leaf paper, graphing paper, writing utensils (blue pen, pencils), ruler, calculator, agenda.

Teacher Availability:

Teacher help will be available during lunch and after school by appointment.
Parents/Guardians may contact me at the school by phone or email at:
srossy@lbpearson.ca

Students Are Expected To:

- **Be Punctual** – It is important to arrive on time with the required materials.
- **Be Prepared** – Assigned work is expected to be completed on time. If it is not, the parent/guardian's will be contacted and a mark of 0 may result.
- **Be Polite** – Rude language and comments as well as inappropriate behavior are unacceptable.
- Follow the rules laid out in the agenda. Pay particular attention to the sections regarding **coats, phones, iPods, and MP3 players**.
- Turn their assigned homework in promptly. In the absence of any specific assignment, a minimum of 20 minutes nightly review of the material is the homework.
- Check website regularly at www.drrossymathandscience.weebly.com

-----Please sign, detach, & return-----

As parent/guardian of _____, we have read and understand the Secondary V **Physics** course outline.

Signature of student: _____

Name of parent (print): _____

Signature of parent: _____

Email: _____