

# MAC Science Department



Course: Science & Technology 404

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 understand the issues behind many of the environmental challenges facing our planet and to analyze the current use of its resources
- To develop knowledge and skills in the fields of mechanical and electrical engineering.
- To practice good study and work skills - Organization and preparedness are essential -

## Topics Covered:

<b>Material World</b>	<b>Earth and Space</b>	<b>Living World</b>	<b>Technological World</b>
<ul style="list-style-type: none"><li>• Atoms and elements</li><li>• Molecules and solutions</li><li>• Changes in matter and energy</li><li>• Electricity and magnetism</li></ul>	<ul style="list-style-type: none"><li>• Rocks, minerals, soil and energy</li><li>• Watersheds, ocean circulation</li><li>• Atmospheric circulation and solar radiation</li><li>• Biomes,</li><li>• C,N, P cycles</li></ul>	<ul style="list-style-type: none"><li>• Populations, communities, and ecosystems</li><li>• The interaction between individuals</li><li>• Trophic relationships</li></ul>	<ul style="list-style-type: none"><li>• Constraints and mechanical properties</li><li>• Materials science</li><li>• Mechanical engineering</li><li>• Electrical engineering</li></ul>

### **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, writing utensils (blue pen, pencils), ruler, calculator, agenda.

### **Teacher Availability:**

Times during school hours to be announced in class.

Parents/Guardians may contact me at the school by phone or email at:

[srossy@lbpearson.ca](mailto: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](http://www.drrossymathandscience.weebly.com)

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

As parent/guardian of \_\_\_\_\_, we have read and understand the Secondary IV **Science & Technology** course outline.

Signature of student: \_\_\_\_\_

Name of parent (print): \_\_\_\_\_

Signature of parent: \_\_\_\_\_

Email: \_\_\_\_\_