**École Secondaire LAURIER MACDONALD High School**
**7355 Viau, Saint-Leonard H1S 3C2**
**Tel: 514-374-6000 Fax: 514-374-7220**

## COURSE STANDARDS AND PROCEDURES

**COURSE**:

Secondary 5 Chemistry, 551-504

**CLASS RESOURCES:** Practical Guide and Study Guide.

**COURSE DESCRIPTION**: This course is for those wishing to enter CEGEP in the Pure and Applied or Health Science Programs. Students study chemical phenomena, gases and their applications, energy in chemical reactions, rate of chemical reactions and equilibrium in chemical reactions. The inter-relationship of science, technology and society is explored throughout the program. The secondary 4 prerequisites are Scientific Math and Environmental Science.

Students will become familiar with standard laboratory practices and be encouraged to apply theoretical concepts in a practical way through lab work and hands-on activities. Students will learn that science is a process as well as a body of knowledge.

In this course, students will also become familiar with standard laboratory practices and lab reports to better prepare them for CEGEP.

**MYP AIMS ADDRESSED BY THE COURSE**:

| MYP Course Aims | MEQ Course Objectives |
|---|---|
| Develops skills to design and perform investigations, evaluate evidence, and reach conclusions | Competency 1: Seeks answers or solutions to scientific or technological problems |
| Cultivate analytical inquiring and flexible minds that pose questions, solves problems, construct explanations, and judge arguments. | Competency 2: Makes the most of his/her knowledge of science and technology |

**FUNDAMENTAL IB CONCEPTS**:

Holistic learning: While teaching Energy Transfer, students research various methods in which Energy Consumption can be reduced while minimizing Greenhouse Gases as well as other types of pollution. Students are exposed to various mathematical calculations that are involved in heat transfer. Students will conduct various labs and activities that reflect how to apply these calculations in a real-life setting as well as how to communicate using appropriate scientific language.

Communication: Students will write essays and conduct experiments in which they will have to use the appropriate scientific language.

**KEY INSTRUCTIONAL STRATEGIES/APPROACHES TO LEARNING**: - The ATL that will be focused on is critical thinking. Students will analyze and evaluate issues and ideas by gathering and organizing relevant information to formulate an argument and interpret data to draw reasonable conclusions and generalizations. This will be achieved by incorporating various inquiry-based activities throughout the year.

**IB MYP LEARNER PROFILE**:

Knowledgeable: During the inquiry-based activities, students will be asked to use their previous knowledge on different scientific concepts in order to solve a new problem.

Inquirers: Students will develop their skills for inquiry and become independent learners.

**FORMATIVE & SUMMATIVE ASSESSMENT INCLUDING MYP ASSESSMENT:**

<table>
<tr><th colspan="3">Term 1</th></tr>
<tr><td>Competencies targeted</td><td>Evaluation methods</td><td>Timeline</td></tr>
<tr><td>Competency 1: Theory; 60%<br><br>Competency 2: Practical; (Labs) 40%</td><td>May include, but not limited to:<br>- Quizzes<br>- Tests<br>- Lab reports<br>- Assignments<br>- Homework</td><td>To finish by:<br>November 6th</td></tr>
<tr><td>Communication to students and parents</td><td colspan="2">Materials required</td></tr>
<tr><td>Curriculum Night<br><br>Progress report<br><br>Report card<br><br>Verbal/Written communication, telephone/email may be on an as needed basis</td><td colspan="2">- Pens/Pencils/Highlighters<br>- Notebook/Loose leaf and binder<br>- Scientific calculator<br>- Study Guide<br>- Practical Guide<br>- Textbook (if needed)</td></tr>
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| *IB MYP Criterion* | *Examples of assessment/feedback both formative and/or summative* |
|---|---|
| A: Knowing and understanding<br>B: Inquiring and designing<br>C: Processing and evaluating<br>D: Reflecting on the impacts of science | - Quizzes<br>- Tests<br>- Lab reports |

| **Term 2** | | |
|---|---|---|
| *Competencies targeted* | *Evaluation methods* | *Timeline* |
| Competency 1: Theory; 60%<br><br>Competency 2: Practical; (Labs) 40% | May include, but not limited to:<br>-Quizzes<br>-Tests<br>-Lab reports<br>-Essay<br>-Assignments<br>-Homework | To finish by:<br>February 6th |
| *Communication to students and parents* | *Materials required* | |
| Report card in February<br><br>Verbal/Written communication, telephone/e-mail may be on an as needed basis | -Pens/Pencils/Highlighters<br>-Notebook/Loose leaf and binder<br>-Scientific calculator<br>-Study Guide<br>-Practical Guide<br>-Textbook (if needed) | |
| *IB MYP Criterion* | *Examples of assessment/feedback both formative and/or summative* | |
| Criterion A: Knowing and understanding<br>Criterion B: Inquiring and designing<br>Criterion C: Processing and evaluating<br>Criterion D: Reflecting on the impacts of science | -Quizzes<br><br>-Tests<br>- Essay<br>- Lab reports | |

| **Term 3** | | |
|---|---|---|
| *Competencies targeted* | *Evaluation methods* | *Timeline* |
| Competency 1: Theory; 60% | May include, but not limited to:<br>-Quizzes | To finish by:<br>June 17th |

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|---|---|---|
| Competency 2: Practical; (Labs) 40% | -Tests<br>-Lab reports<br>-Essay<br>-Assignments<br>-Homework<br>-Theory Exam<br>-Lab Exam | |
| *Communication to students and parents* | *Materials required* | |
| Report card in June<br><br>Verbal/Written communication, telephone/e-mail may be on an as needed basis | -Pens/Pencils/Highlighters<br>-Notebook/Loose leaf and binder<br>-Scientific calculator<br>-Pencil Crayons<br>-Study Guide<br>-Practical Guide<br>-Textbook (if needed) | |
| *IB MYP Criterion* | *Examples of assessment/feedback both formative and/or summative* | |
| Criterion A: Knowing and understanding<br>Criterion B: Inquiring and designing<br>Criterion C: Processing and evaluating<br>Criterion D: Reflecting on the impacts of science | - Quizzes<br>- Tests<br>- Essay<br>- Lab reports<br>- Lab Exam | |

| **Additional Information/Specifications** |
|---|
| ****NOTE THAT THE WEIGHTING OF THE FINAL EXAM IS SUBJECT TO CHANGE*<br><br>☐ This course does not have a final exam. The final course grade comes entirely from the school course grade.<br><br>☐ This course has a final exam administered by the school. The final course grade is determined by taking 70% of the school course grade and 30% of the school board exam.<br><br>☐ This course has a final exam administered by the *Ministère de l'Éducation du Québec* (MEQ). The final course grade is determined by taking 50% of the school course grade and 50% of the MEQ exam. Please note that the final course grade is subject to MEQ moderation. |