



COURSE STANDARDS AND PROCEDURES

COURSE:

Secondary 2 Science & Technology, 555-204

CLASS RESOURCES: Worlds workbook and online exercises, Explore Learning

COURSE DESCRIPTION:

Secondary 2 Science and Technology is a stepping stone from building a foundation to creating an understanding of scientific concepts. The focus of this course is to build an understanding of science and its implications in our lives. The course involves hands-on labs, virtual labs for individual practice as well as theoretical components.

Students will understand that science is a process as well as a body of knowledge. Students will explore the design cycle (investigation, design, planning, creation and evaluation).

In this course, students will also become familiar with standard laboratory practices and be encouraged to apply theoretical concepts in a practical way through lab work.

MYP AIMS ADDRESSED BY THE COURSE:

| MYP Course Aims | MEES 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, solve problems, construct explanations, and judge arguments. | Competency 2: Makes the most of his/her knowledge of science and technology. |

FUNDAMENTAL IB CONCEPTS:

- Communication: Students will conduct labs and complete hands-on activities and assignments in which they will have to use the appropriate scientific language.

KEY INSTRUCTIONAL STRATEGIES/APPROACHES TO LEARNING:

- The ATLs 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 of different scientific concepts in order to solve a new problem.
- Inquirers: Students will develop their skills for inquiry.

FORMATIVE & SUMMATIVE ASSESSMENT INCLUDING MYP ASSESSMENT:

| Term 1 | | |
|---|--|---------------------------|
| <i>Competencies targeted</i> | <i>Evaluation methods</i> | <i>Timeline</i> |
| Competency 1: Theory; 60% Competency 2: Practical; (Labs and Design cycle) 40% | May include, but not limited to: -Quizzes -Tests -Lab reports -Assignments -Homework | To finish by November 6th |
| <i>Communication to students and parents</i> | <i>Materials required</i> | |
| Curriculum Night Progress report Report card Verbal/Written communication, telephone/email may be on an as needed basis | Pens/Pencils/Highlighters Worlds workbook and online exercises, www.explorellearning.com , | |
| <i>IB MYP Criterion</i> | <i>Examples of assessment/feedback both formative and/or summative</i> | |
| <ul style="list-style-type: none"> • <i>A: Knowing and understanding</i> • <i>B: Inquiring and designing</i> • <i>C: Processing and evaluating</i> • <i>D: Reflecting on the impacts of science</i> | Standardized chapter tests Self evaluations | |

| Term 2 | | |
|---|---|---------------------------------------|
| <i>Competencies targeted</i> | <i>Evaluation methods</i> | <i>Timeline</i> |
| <p>Competency 1: Theory; 60%</p> <p>Competency 2: Practical; (Labs and Design cycle) 40%</p> | <p>May include, but not limited to:</p> <ul style="list-style-type: none"> -Quizzes -Tests -Lab reports -Assignments -Homework | <p>To finish by: February 6th</p> |
| <i>Communication to students and parents</i> | <i>Materials required</i> | |
| <p>Report card in February</p> <p>Verbal/Written communication, telephone/e-mail may be on an as needed basis</p> | <p>Pens/Pencils/Highlighters</p> <p>Worlds workbook and online exercises, www.explorelearning.com,</p> | |
| <i>IB MYP Criterion</i> | <i>Examples of assessment/feedback both formative and/or summative</i> | |
| <ul style="list-style-type: none"> • <i>A: Knowing and understanding</i> • <i>B: Inquiring and designing</i> • <i>C: Processing and evaluating</i> • <i>D: Reflecting on the impacts of science</i> | <p>Assignments</p> <p>Test</p> | |

| Term 3 | | |
|---|--|----------------------------------|
| <i>Competencies targeted</i> | <i>Evaluation methods</i> | <i>Timeline</i> |
| <p>Competency 1: Theory; 60%</p> <p>Competency 2: Practical; (Labs and Design cycle) 40%</p> | <p>May include, but not limited to:</p> <ul style="list-style-type: none"> -Quizzes -Tests -Lab reports -Assignments -Homework -Final lab exam -Final theory exam | <p>To finish by: June 17</p> |
| <i>Communication to students and parents</i> | <i>Materials required</i> | |
| <p>Report card in June</p> <p>Verbal/Written communication, telephone/e-mail may be on an as needed basis</p> | <p>Pens/Pencils/Highlighters</p> <ul style="list-style-type: none"> -Notebook/Loose leaf and binder -Scientific calculator -Pencil Crayons -Study Guide -Practical Guide -Textbook | |
| <i>IB MYP Criterion</i> | <i>Examples of assessment/feedback both formative and/or summative</i> | |
| <ul style="list-style-type: none"> • <i>A: Knowing and understanding</i> • <i>B: Inquiring and designing</i> • <i>C: Processing and evaluating</i> • <i>D: Reflecting on the impacts of science</i> | <p>Board Game Design</p> <p>Lab exam</p> <p>June theory exam</p> | |

| Additional Information/Specifications |
|---|
| <p>***NOTE THAT THE WEIGHTING OF THE FINAL EXAM IS SUBJECT TO CHANGE.</p> <p><input type="checkbox"/> This course does not have a final exam. The final course grade comes entirely from the school course grade.</p> <p><input type="checkbox"/> This course has a final exam administered by the English Montreal School Board. The final course grade is determined by taking 70% of the school course grade and 30% of the school board exam.</p> <p><input type="checkbox"/> This course has a final exam administered by the <i>Ministère de l'Éducation et de l'Enseignement Supérieur</i> (MEES). The final course grade is determined by taking 50% of the school course grade and 50% of the MEES exam. Please note that the final course grade is subject to MEEs moderation.</p> |