



COURSE STANDARDS AND PROCEDURES

COURSE:

Secondary 5 General Science, 558-504

CLASS RESOURCES: Practical Guide

COURSE DESCRIPTION: This is a course for Secondary 5 students in the enriched stream who are not taking Chemistry and Physics. Students will study basic Biology and Ecology concepts. Some of the topics include the scientific method, population and communities, genetics, biological adaptations, classification and human impact on the environment.

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 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). One example is where students will have to create a pinball machine and evaluate their design.

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 answer or solutions to scientific or technological problems.
Cultivate analytical inquiry 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: - Holistic learning: While teaching relationships between organisms, students will explore different facets, such as environmental influences, the ethics of protecting species, and much more.

- 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 are not limited to: -Quizzes -Tests -Lab reports -Assignments -Homework	To finish by: November 6 th
<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 -Notebook/Loose leaf and binder -Scientific calculator -Pencil Crayons -Practical Guide	
<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> 	Relationship letter Endanger species	

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> <ul style="list-style-type: none"> -Notebook/Loose leaf and binder -Scientific calculator -Pencil Crayons -Practical Guide 	
<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>Endangered species</p> <p>Genetics assignments</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 	<p>To finish by: June 17th</p>
<i>Communication to students and parents</i>	<i>Materials required</i>	
<p>Report card in February</p>	<p>Pens/Pencils/Highlighters</p> <ul style="list-style-type: none"> -Notebook/Loose leaf and binder -Scientific calculator -Pencil Crayons 	

Verbal/Written communication, telephone/e-mail may be on an as needed basis	-Practical Guide
<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> 	Pinball machine

Additional Information/Specifications

Click here to enter text.

- ☐ This course does not have a final exam. The final course grade comes entirely from the school course grade.
- ☐ 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.
- ☐ This course has a final exam administered by the *Ministère de l'Éducation et de l'Enseignement Supérieur* (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.