# PHILEMON WRIGHT HIGH SCHOOL

# **COURSE SELECTION PACKAGE 2014-2015**



# **STUDENTS ENTERING SECONDARY 4**

## **Included in this package:**

- Instructions for completing a course selection form
- > Sec. 4 course selection form (return to Day 5 homeroom teacher by March 20<sup>th</sup>, 2014)
- Elective course and Math/Science pathway descriptions

  \*Please note, should re-registration forms not be returned to Ms. Miljour, your child will not officially be registered to attend PW next year and a parent/quardian will be required to present themselves at the school in order to re-register\*

# How To Complete Your Course Selection Form Students Entering Secondary 4 2014-2015

Selecting courses for the next school year is a very important decision, and should be thought about carefully and discussed by both students and parents. In order to begin, fill out your name, date of birth, and whether or not you will be attending Philemon Wright next year.

Follow the instructions below to properly fill out each of the corresponding sections of your form:

- 1. Compulsory Courses Check the box for one (1) program, the General English program or the Enriched French program. In order to choose or remain in the Enriched French program, a student must be maintaining a 70% or higher average in his/her Grade 9 French/Français course. Eligibility for the program will be determined on a case-by-case basis.
- **2.** Math Pathway Check the box for one (1) pathway, the Cultural, Social & Technical or the Science Math pathway.
  - If choosing CST Math: The Cultural Math course allows students to continue at the CEGEP/college level in programs that are not Math/Science related (Social Sciences, the Arts, etc.), and is the minimum requirement for graduation. Students not wishing to study in Math/Science programs or who have struggled with Math previously are recommended to choose the Cultural Math course. Students who have completed Grade 9 Math with a final result below 76% are required to select Cultural Math.
  - If choosing Science Math: The Science Math course is a pre-requisite for Math/Science related programming at the CEGEP/college level. Students wishing to continue in post-secondary programs that require advanced Level IV & V Math are recommended to take the Science Math option. Students who wish to go into Science Math must have completed Grade 9 Math with a final result of 76% or higher, and speak to their current year's Math teacher about a recommendation before choosing Science Math.
- 3. Compulsory Arts Courses Place a number from 1 to 3 in the boxes for each of the compulsory Arts courses in order of preference (1 being your most preferred, 3 being your least). It is important to note that in order to obtain a secondary school diploma in Quebec, the student must receive credit for a Secondary IV Arts elective. Please see descriptions attached for further details.
- 4. Science Pathway Check the box for one (1) pathway, either Applied Science or General Science (which is paired with the Bridging Science of the Environment elective). Please note that both of these programs allow a student to enter CEGEP. The major difference is that students who wish to continue with Math/Science related programs at the post-secondary level are required to take the Bridging Science pathway, as it is the pre-requisite for Chemistry and/or Physics at the Secondary V level. If you choose the General Science pathway, do not complete section 5 on your course selection form.
- 5. Elective Courses Place numbers from 1 to 3 beside your course choices (1 being your most preferred, 3 being your least). Please see descriptions attached for further details. Each Grade 10 student will be scheduled for one (1) elective option course.

Once you have completed all five sections of the form, please sign (and have your parent/guardian sign) and return your completed form to your homeroom teacher (Day 5) by March 20<sup>th</sup>, 2014.

If you have any questions about the enclosed form or information, please see Ashley Smith, Academic Counsellor, in Room 123 or contact her by e-mail at <a href="mailto:asmith@wgsb.qc.ca">asmith@wgsb.qc.ca</a>.

## **Compulsory Arts Course Descriptions (Secondary 4)**

#### ART402 Visual Arts

This course emphasizes learning through practice; building prior knowledge and introducing students to new ideas, materials and processes for artistic thinking and experimentation. Students will experiment with a large variety of art materials, with which the art room at Philemon is well supplied. By the end of this course students will:

- Demonstrate the ability to use an increasing range of tools, materials, processes and technologies in producing works of fine art and applied design;
- Demonstrate the ability to review and evaluate the creative process they use, as well as the resulting artworks.
- Use research material (including material obtained from the Internet) appropriately and expressively in the preparation stage of studio assignments.
- Apply the creative process (i.e., perception, exploration, experimentation, production, and evaluation) in their work;
- Apply a frame work of critical analysis through appreciation, critiquing and acknowledging.

#### DRA402 Drama

Drama 402 builds on the skills of Grade 9 Drama, through the exploration of voice, movement, character, skits, improvisation and performance. Students will develop an appreciation of and competence in the performing arts.

#### MUS402 Music

Music 402 will focus on three competencies: performing, appreciating and creating music. Using music as a tool of discovery, students will have the opportunity to deepen their understanding of themselves and their potential, assess/discuss/perform musical works, experience community building and team work by playing in a ensemble and expand upon previously attained practical and theoretical musical knowledge. Assessment is ongoing and includes instrument comprehension, group performance, individual performance and musical theory.

## **Science Pathway Course Descriptions (Secondary 4)**

#### STA416 Applied Science & Technology

Students are expected to develop a deeper understanding of how things work through analysis and design of technological applications. They will test hypotheses as a means to help them understand more about the world around them. Experimentation, technological analysis and design may be included in this process.

### STG444 General Science & Technology &

#### SCE404 Bridging Science of the Environment

These courses are offered in combination with one another, and use many of the same resources as the Applied Science & Technology course. However, they address additional concepts and resources that prepare students for studies in senior sciences. In addition to climate change, the energy challenge, drinking water and deforestation, this course includes the issues of energy, residual materials and food production. It is intended to make students aware of the importance of considering the short, medium and long term environmental impact of science and to prepare some of them for careers in which they will monitor and assess this impact in their community. **NOTE:** Enrollment in and successful completion of this pathway is required for students to take Chemistry and/or Physics in Secondary V, both courses that are required for entry into a CEGEP Pure & Applied Sciences program.

## **Elective Course Descriptions (Secondary 4)**

#### JEP452 Journalism & Media Studies

To take this course, students must have passed Sec. III English. Students will examine techniques for information gathering, writing, photography and editing relevant to publication. Through understanding the principles of effective communication, students will analyze contemporary issues and organize material for public delivery. There is a heavy media focus in this course, offering students the chance to analyze, discuss and create various media works.

#### HAW452 Home Economics

This course will focus on the following areas of study: foods & nutrition (Kitchen Safety & Sanitation, Equipment, Knowledge of Nutrition Principles, Cooking Methods), consumerism (Brand Comparison, Food Labeling, Fast Foods, Homemade vs. Convenience), and self-management (Household Finances, Budgeting, Grocery Shopping, Healthy Habits).

#### PEM444 Advanced Physical Education & Health

To take this course, students must have passed Sec. IV Physical Education with 85% or higher overall. This course includes cross-country skiing, weight training, badminton, fitness and camping, advanced training in the traditional individual and team sports, with exposure to leisure-time activities at the Sportheque de Hull. Optional Outdoor trips may occur at an additional cost.

**SPA404** This course stresses a conversational approach. Students develop their grammar and vocabulary skills in everyday oral dialogues. Studies will also include Spanish culture and Spanish countries, with the potential for a cultural exchange.

## **Math Pathway Course Descriptions (Secondary 4)**

#### **Frequently Asked Questions Regarding the Mathematics Courses:**

#### 1. Which math option do I need to graduate?

Students require either of the two Secondary 4 math courses to graduate.

#### 2. Can I get into CEGEP with either math options?

Yes, however you must keep in mind that some programs require the Science Math as a prerequisite (ie. Pure & Applied Sciences, Commerce, Computer Science, Engineering, etc.). You are advised to make an appointment with Mr. Rosseel in Guidance to discuss post-secondary options.

#### 3. Can I switch from one math to another after making my course selection this spring?

Students have until the "drop date" deadline (Friday, September 26<sup>th</sup>) to change from one math pathway to another. Following that date, students must remain in the course they have selected for the remainder of the year.

#### 4. Is one math option more difficult than another?

While both pathways provide challenges, overall, the concepts studied Science Math are more complex than those studied in Cultural, Social, & Technical Math; hence, the recommended prerequisite that students demonstrate competency of at least a 76% in Math 306 in order to select Science Math.

#### Grade 10 Math: Cultural, Social, & Technical Mathematics Option

The *Cultural, Social and Technical* option allows students to build on their knowledge of basic mathematics. Specifically, it prepares them for studies in the arts, communications, the humanities and the social sciences.

Arithmetic & Algebra	Statistics & Probability	Geometry & Graphs
Algebraic expression	<ul> <li>Subjective probability</li> </ul>	Analytic geometry
<ul> <li>First-degree inequality in two variables</li> </ul>	<ul> <li>Fairness: odds, mathematical expectation</li> </ul>	<ul> <li>Change: distance, slope, point of division</li> </ul>
Relation, function and inverse	One-variable distribution	<ul> <li>Straight line and half-plane: parallel and</li> </ul>
<ul> <li>Real function: polynomial of degree less than</li> </ul>	<ul> <li>Measure of position: percentile</li> </ul>	perpendicular
3,	<ul> <li>Measure of dispersion: mean deviation</li> </ul>	lines
exponential, periodic, step, piecewise	Two-variable distribution	Measurement
System	<ul> <li>Linear correlation: correlation coefficient</li> </ul>	<ul> <li>Relationships in triangles: sine, cosine,</li> </ul>
<ul> <li>System of first-degree equations in two</li> </ul>	and regression line	tangent, sine
variables		law and Hero's formula

#### **Grade 10 Math: Science Mathematics Option**

\*it is highly recommended that students who choose the Science Math option also purchase a TI-84 Plus/Silver Edition Graphing Calculator\*

The *Science* option is intended for students who seek to understand the origin of different phenomena and how they work, as well as to explain them and make decisions that pertain to them. Students learn to develop formal proofs in situations where there is always a need to confirm a truth. By focusing on the properties of mathematical objects, this option places greater emphasis on students' capacity for abstract thinking in that they are required to perform more complex algebraic operations. The emphasis is on finding, developing and analyzing models within the context of experiments mainly related to different scientific fields. Students who choose this option develop strategies and acquire an academic background that specifically enables them to pursue their studies in the hard sciences or to perhaps eventually specialize in research.

Arithmetic & Algebra	Statistics & Probability	Geometry & Graphs
Algebraic expression	Two-variable distribution	Equivalent figures
<ul> <li>Algebraic identity, second-degree equation</li> </ul>	<ul> <li>Linear correlation: correlation coefficient</li> </ul>	Analytic geometry
and inequality	and regression line	<ul> <li>Straight lines and the distance between two</li> </ul>
in one variable		points
Real function		Measurement
<ul><li>Step function (greatest integer); second-</li></ul>		<ul> <li>Metric and trigonometric relations in</li> </ul>
degree polynomial		triangles (sine,
function (standard, general and factored forms)		cosine, tangent, sine and cosine laws)
– Parameter		
System		
<ul> <li>System of first-degree equations in two</li> </ul>		
variables		
<ul> <li>System composed of a first-degree equation</li> </ul>		
and		
a second-degree equation in two variables		

# **PHILEMON WRIGHT HIGH SCHOOL**

# STUDENTS ENTERING SECONDARY 4 COURSE SELECTION FORM 2014-2015

- Final placement in all courses will be determined by the school.
- If you wish to withdraw from the Enriched French program, you must do so by March 20<sup>th</sup>, 2014.
- All option/advanced/enriched French classes offered are subject to sufficient numbers to warrant a class.



STUDENT'S NAME:	D.O.B.:		
(PRINT YOUR NAME)			
We, the student and parent, understand that every attempt will be made to schedule the preferred option, however the school cannot guarantee the numbered choices will be honored. Friday, September 26 <sup>th</sup> , 2014 will be the last day for option request changes. If the first choice is scheduled, no course change will be granted.			
I WILL BE ATTENDING PHILEMON WRIGHT for the 2014-2015 so	chool year.		
☐ I WILL NOT BE ATTENDING PHILEMON WRIGHT for the 2014-2015 school year. (Reason:			
STUDENT SIGNATURE	PARENT/GUARDIAN SIGNATURE		
1. COMPULSORY COURSES (choose one)			
Note: Any student who fails a compulsory course at the Secondary 3 level will be	3. COMPULSORY ARTS COURSES		
required to repeat that course, and may jeopardize his/her graduation status.	(Number 1-3 in order of preference)		
GENERAL ENGLISH PROGRAM			
ENG406 English Language Arts	ART402 Visual Arts		
ETH404 Ethics & Religious Culture	DRA402 Drama		
FRB404 French Second Language	MUS402 Music		
HIS404 History & Citizenship Education	IVIUSIC		
PED402 Physical Education & Health			
ENRICHED FRENCH PROGRAM			
[requires 70%+ final result in Grade 9 French course(s)]	4. SCIENCE PATHWAY (choose one)		
ENG406 English Language Arts	Note: Students must successfully complete the General Science/Bridging Science		
ETH404 Ethics & Religious Culture	pathway in order to be eligible for Physics and/or Chemistry in Grade 11. When a		
FRI406 French Second Language	student chooses this pathway, Bridging Science becomes his/her elective course, and therefore does not choose an option below.		
HIF404 History & Citizenship Education	,		
PED402 Physical Education & Health	STA416 Applied Science & Technology		
2. MATH PATHWAY (choose one)	STCAAA Concept Science & Technology naived with		
Note: Any student who fails his/her previous Math course will be required to	STG444 General Science & Technology paired with SCE404 Bridging Science & Tech. of the Environment		
repeat that course, and may jeopardize his/her graduation status.	— Secret Bridging Science & Teem of the Environment		
MCH414 Cultural Social & Tochnical Math			
MCU414 Cultural, Social & Technical Math [students who have completed Grade 9 Math with a final	5. <b>ELECTIVE COURSES</b> (number 1-3 in order of preference)		
result below 76% are required to select Cultural Math]	Note: Each Grade 10 student will receive one elective course, unless he/she has		
NASCARS Science Math	chosen the General Science pathway. DO NOT complete the section below if you chose General Science, as Bridging Science will be your elective.		
MSC426 Science Math  [students must have completed Grade 9 Math with a final result of			
76% or higher and speak to their current year's Math teacher about	HAW452 Home Economics		
a recommendation before choosing Science Math]	JEP452 Journalism & Media Studies		
CURRENT YEAR'S MATH TEACHER:	PEM444 Advanced Physical Education		
Is the student recommended for Science Math? Yes [ ] No[ ]			
	SPA404 Spanish Language & Culture		
TEACHER SIGNATURE:			

THIS COMPLETED FORM MUST BE RETURNED TO YOUR HOMEROOM TEACHER (Day 5) OR MS. MILJOUR IN ROOM 129 by March 20<sup>th</sup>, 2014