### ÉCOLE SECONDAIRE KELVIN HIGH SCHOOL





### STUDENT COURSE HANDBOOK 2025-2026

### ÉCOLE SECONDAIRE KELVIN HIGH SCHOOL COURSE HANDBOOK TABLE OF CONTENTS



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## ÉCOLE SECONDAIRE KELVIN HIGH SCHOC

Welcome to the school community of École secondaire Kelvin High School!! Kelvin strives to be a school that allows for all of our students to attain academic excellence. We believe that high school is an opportunity for our students to explore, find and grow their passions. Our school administration team is committed to creating and maintaining a positive school environment where students are valued as individuals and are challenged to grow both academically and socially.

École secondaire Kelvin High School is located at 155 Kingsway at the eastern edge of the River Heights neighbourhood. To support our students, we offer an academic English Program, French Immersion and the International Baccalaureate Diploma Program. The school offers a set of compulsory courses and an everevolving group of optional courses that are created to meet the different interests of each of our students. In addition, we offer an outstanding Arts Program that allows students opportunities in Fine Arts, Band, Dance, Theatre and Choir.

A true strength of Kelvin is not just our ability to offer excellent academic programming but to offer our students a strong extra-curricular program that offers students multiple opportunities to become deeply involved in school life. This includes strong athletic and performing arts programs and a vast array of clubs and groups that covers activities from cultural, social awareness, environmental action to e-sports.



These activities allow our students to explore passions and to have voice in their community.

In the Kelvin Handbook you will have the opportunity to find information about our school and the services we provide to our student community. A comprehensive guide to all programs to help guide the process of course selection is included in our handbook.

At Kelvin we value the importance of ongoing communication with our students and their families. This allows us to best support all of our students through their high school experiences. Please contact us if you have any questions, concerns or needs for your child.

We look forward to having the opportunity to work with you and your family!

Tim Cox Principal

# **SCHOOL INFORMATION**

#### **TEACHER ADVISOR**

Teacher Advisors are assigned to every student upon enrollment. Students in Grades 10, 11 and 12 will have the same teacher advisor throughout their years at Kelvin. Students meet with their teacher advisor at the beginning of each semester and at set times throughout the year. Grade 9 students will have their first period (A slot) class teacher as an advisor for their first year at Kelvin.

#### **PREPARATION PERIODS**

Grade 9 students are fully timetabled while most students in Grades 10, 11, and 12 will have some unassigned time in their timetables. During preparation periods a student can choose to go to the library, resource room or the school's cafeteria.

#### ATTENDANCE

École secondaire Kelvin High School believes that attendance is an important component of academic success. The expectation is all students attend classes daily and arrive on time. Whenever students are absent from class parents need to contact **Safe Arrival** at 1-855-278-4513, (or download the **SchoolMessenger** app from the Apple or Google store) to report the absence or late. An automated calling system will contact the home every time a student is absent unless a parent/ guardian verifies the absence. Parents/guardians are encouraged to contact their child's teacher at any time. Additional school supports are available to students experiencing concerning attendance patterns. More information about Safe Arrival may be found on the school website.

### **SCHOOL INFORMATION**

#### **ATTENDANCE** (continued)

**Student Travel Absenteeism Form** is required for personal trips, medical reasons and sports/ event related trips that are non-school related (3 days or longer). This form is available on our school website under the Community & Family tab. Parents/ guardians, teachers and an administrator must sign the form and parent/guardians must register the absence via Safe Arrival. Family trips are discouraged during provincial and Kelvin exam periods.

#### CAFETERIA

The school's cafeteria provides hot and cold snacks and meals at reasonable prices. Students are expected to display respectful behaviour at all times and are reminded to place refuse in garbage bins, recyclables into the boxes provided and food waste in compost bins.

#### **COMPUTER USE POLICY**

At École secondaire Kelvin High School, we provide students with the necessary tools to develop appropriate technological skills, including access to the Internet. This policy is contained in each new student application which must be signed by students and parents prior to the student gaining access to the Internet.

#### **DIGITAL TOOLS**

Today's digital world has changed teaching. There are a number of useful online tools for learners. The following digital tools are recommended to support student learning for all our language programs:

WordReference.com – an excellent online dictionary for Spanish and French

Bonpatron.com – a proofreading tool with spell check and grammar check

SpanishChecker.com - a proofreading tool with spell check and grammar check

Translation tools are not acceptable language/ learning software/tools. Chat GPT and other Al tools such as programs like Google Translate, with ready-made answers which require no evaluation or intellectual participation are not acceptable. The student is submitting work that is not their own which is considered plagiarism. In addition, these tools often only provide a literal word for word translation, often incorrect or illogical. Students who make use of these tools are not displaying academic honesty.

#### MEDIA RELEASE FORM

At certain times throughout the year, the media may visit the school to report on student events and activities. The Informed Consent-Students form gives permission for photos and/or interviews to be taken/conducted for use in Division and non-Division publication(s).

#### **SMOKING AND VAPING**

The Winnipeg School Division was declared completely smoke free as of September, 2007. Students are not permitted to smoke anywhere on school grounds. This includes chewing tobacco (all tobacco products), e-cigarettes and vapes.

#### LOCKERS

Lockers and locks are assigned, free of charge, by teacher advisors at the beginning of the school year. The school reserves the right to enter any locker at any time. A reminder to students that personal locks will be removed if brought into the school. Students are also advised not to bring valuables to school.

#### PARENT COUNCIL

This is an active and interested group of parents who assist the staff at École secondaire Kelvin High School in their efforts to deliver excellent educational programs. The council meets five times a year and parents are encouraged to take an active role in the process. Further information may be obtained by contacting the school directly at 204-474-1492 or by visiting the school's website at www.winnipegsd.ca/schools/kelvin.

#### **CELL PHONES**

The province of Manitoba prohibits the use of cell phones and all supporting devices (headphones, etc.) during class time. This policy acknowledges the need for students to focus on their learning during classroom instruction and learning activities that are free from the distractions of personal technology. Students must keep their phones and associated devices in their backpacks or kept in their lockers.

## STUDENT SERVICES

#### COUNSELLING

School counsellors are available to meet with students and/or guardians to provide assistance of a general or personal nature. Support is provided in a wide variety of areas such as:

- career advising, post-secondary education and scholarship information
- · academic programming and course selection
- personal/social issues that affect the student's social, emotional, and physical well being
- consultation with Clinical Support Services team and formal referrals when required

Students can be assured that personal concerns will be discussed in a caring, confidential and supportive atmosphere.

Students are invited to make an appointment by contacting our Guidance secretary at 204-474-1156 or by visiting the Guidance Office.

#### LEARNING SUPPORT

Students referred to the Resource Department receive assistance primarily in compulsory courses. Services can be accessed by selfreferral, teacher referral, or parental referral. Intervention may be in the form of one to one, small group instruction or indirect classroom support through consultation and collaboration with the classroom teacher, learning support teacher, resource teacher and student services team.

#### **BEYOND THE CLASSROOM**

The wide range of extra-curricular activities available at École secondaire Kelvin High School is truly unique. It is strongly recommended that students take advantage of these opportunities to further enrich their school experience. There is something for everyone...from the athlete to the singer, the environmentalist to the writer; there is an opportunity for everyone to explore their interests. We encourage all students to get involved. Daily announcements are available on the Student Hub Google Classroom, school website, X (formerly known as Twitter) and on the TVs around the school.



#### STUDENT COUNCIL

Student Council provides a wonderful and varied way for students to become involved in school activities. It provides opportunities to develop and take on leadership roles. Elections are held to select a President and Vice-President in early May. Other Executive positions, such as Treasurer, Communications Director, Fundraising Representative, etc are appointed. Open council meetings are held once a week at lunch. Anyone interested is encouraged to attend at any point. Executive meetings are also held on separate days, once a week minimum. Council assumes a variety of roles in the Kelvin community. They plan events as varied as Spirit Week. Dress up Days, Fundraising for local charities and Staff vs Student Games, just to name a few.

Members also participate in committees organized by the Board of Trustees in which they are afforded the opportunity to have a voice in issues that are common throughout the school division. Council can often be the catalyst for change in the building and a conduit through which concerns can be brought up. Anyone with an idea, enthusiasm, or curiosity is more than welcome to participate. Sometimes it's about fun, sometimes it's about work, but it's always about stepping up and trying to make a difference! Looking for a sense of community? Kelvin Student Council is the place for you!

# STUDENT ACTIVITIES

#### ATHLETICS AND ATHLETIC CLUBS

#### "Home of the Clippers"

Kelvin has a long and successful history of involvement in athletic activities. Some sports are organized as school teams for competition with other high schools in the province. Other sports are organized as clubs and are more oriented to recreation, although there may also be a competitive component. The school teams are organized into Grade 9, Junior Varsity, and Varsity for both boys and girls.



Our sports program includes:

- Badminton
- Basketball
- Cheerleading
- Cross country
- Curling
- Football
- Golf
- Hockey
- Indoor/Outdoor track
- Rugby
- Soccer (Indoor/Outdoor)
- Ultimate
- Volleyball
- Water polo

The formation of clubs and teams may vary from year to year dependent on both student interest and the availability of staff supervisors.

#### SPECIAL INTEREST CLUBS

Among these are:

- Chess Club
- E.A.C. (Environmental Action Committee)
- E-sports
- Electronics Club
- Ethics Bowl
- Festival théâtre jeunesse
- Gaming Club (board games)
- Hope for Humanity
- Improv
- Indigenous Student Group
- Indigenous Youth Leadership Group
- The Stapler (school newspaper)
- Reach for the Top
- Rocky Mountain Club
- Spectrum (Gay Straight Alliance)
- Woodworking Club
- Youth in Philanthropy (YIP)

Every school club must be supervised by a teacher and authorized by administration.

# STUDENT ACTIVITIES

#### VISUAL AND PERFORMING ARTS

Each year École secondaire Kelvin High School provides many opportunities for student involvement in the arts. Courses are offered in drama, choral and instrumental music, the visual arts, music history and theory, photography, musical theatre, and dance.



Work done in the visual arts culminates at the Spring Arts Festival at the beginning of June. For the performance artist, whether a budding actor, singer or instrumentalist, as well as those with more of an interest in the technical side of things (lighting, sound etc) there are many opportunities throughout the year to become involved.





Some opportunities include:

- Choral retreat
- ChoralFest Manitoba
- Musical Theatre recent productions: Wizard of Oz, Happy Days, Dirty Rotten Scoundrels, Into the Woods, Little Shop of Horrors, Anything Goes, Sweeney Todd, Cinderella, Clue the Musical and Putnam County Spelling Bee.
- Theatre recent productions: Proof, Waiting for Godot, Top Girls, The Crucible, Radium Girls
- Improv competes in the High School Improv League with the chance of competing nationally.
- Winter choir, dance and band concerts.
- Dance Competitions: The View, CNDC, On the Floor
- Kelvin's Got Talent- Kelvin's fabulous pre-winter break variety show (every second year).
- Coffee House evening variety show.
- Optimist Band Festival
- Winnipeg Music Festival
- Spring Choir & Band Tours (every second year).
- Arts Festival
- Festival Théâtre Jeunesse a provincial immersion and francophone drama festival in early May at Cercle Molière.
- Arts Night

# SCHOOL PROGRAMS

#### **ENGLISH ACADEMIC PROGRAM**

The English Academic program is the standard high school program as outlined by Manitoba Education and Training. This program follows the provincial credit system, from grades 9 through to grade 12 and it prepares students to pursue studies at the post-secondary level.



#### FRENCH IMMERSION PROGRAM

The French Immersion Program promotes functional bilingualism, requiring strong student commitment. To enter this program, students must have completed the Junior High Immersion Program (early or late) or its equivalent. To graduate with a Winnipeg School Division French Immersion Diploma, students must successfully complete at least 15 credits in French. To achieve this goal, the French language must be used exclusively in all French Immersion courses.



#### INTERNATIONAL BACCALAUREATE PROGRAMME

International in perspective and designed for students interested in education for its own sake, this challenging, comprehensive, integrated and highly academic program has practical benefits as well. The IB Programme is internationally recognized as students follow the same course of studies world-wide.

This is a Winnipeg School Division sponsored program, where students enter at the Grade 10 level. All students applying to the IB Programme must have a grade 9 French course/credit. The application process and information can be found on our website.

\*French Immersion and English program students are able to enrol in the IB Programme in Grades 10 or 11 and they can earn IB course results. (please see the French Immersion Diploma Program for more details)

### PLANNING YOUR HIGH SCHOOL PROGRAM

Your high school program should be planned very carefully based on many different pieces of information. What are your academic strengths? What are your long term plans beyond high school? Take special care in considering your compulsory courses and your options. You may contact a school guidance counsellor for assistance.

#### **REGISTRATION PROCEDURES**

Please refer to our school website "School Registration Information" tab for registration procedures and details.

Registration will differ if you are a current WSD student, Kelvin catchment, or a School of Choice student. Contact our Guidance Department for help.

Students must register for compulsory courses in their current grade due to course availability and staffing.



### MANITOBA EDUCATION HIGH SCHOOL DIPLOMA

Manitoba Education requires that students accumulate a minimum of 30 credits (compulsory plus option courses) to graduate. Manitoba universities require five 40S (grade 12) courses, and even though Phys.Ed 40S or 40F is a compulsory grade 12 course, it is not considered a university pre-requisite of the five 40S courses. Students may select courses based on future academic goals or for their personal interests. Please check with a guidance counsellor as university requirements may vary from year to year.

#### ENGLISH ACADEMIC PROGRAM:

The following chart shows the pathway to graduation for students entering our English Academic Program. Upon completion of these requirements, students will receive their Manitoba High School Diploma.

GRADE 9	GRADE 10	GRADE 11	GRADE 12
ELA	ELA (2 credits)*	ELA	ELA
MATH	MATH	MATH	MATH
PHYS. ED.	PHYS. ED.	PHYS. ED.	PHYS. ED.
SOCIAL STUDIES	GEOGRAPHY	HISTORY	ANY 2 ADDITIONAL GRADE 12 LEVEL
SCIENCE	SCIENCE		COURSES FOR GRADUATION
OPTIONS	OPTIONS	OPTIONS	OPTIONS

\*Kelvin High School students in the English Academic program are required to take full year English at the grade 10 level. Students will receive 2 credits.

### MANITOBA EDUCATION HIGH SCHOOL DIPLOMA

#### FRENCH IMMERSION PROGRAM FRENCH IMMERSION PROVINCIAL DIPLOMA

In order to receive a French Immersion Diploma from the province, a minimum of 15 out of the total 30 credits for graduation must be taken in French. Grade 11 FI students must take a minimum of three Grade 11 courses in French; Grade 11 FLA course is compulsory for the diploma. In Grade 12 FI students require a minimum of three Grade 12 courses in French and Grade 12 FLA is a compulsory course for the French Immersion diploma.



9E ANNÉE	10E ANNÉE	11E ANNÉE	12E ANNÉE
FRANÇAIS* (2 credits)	FRANÇAIS	FRANÇAIS	FRANÇAIS
ELA	ELA	ELA	ELA
MATHÉMATIQUES	MATHÉMATIQUES	MATHÉMATIQUES	MATHÉMATIQUES
PHYS. ED.	PHYS. ED.	ED. PHYS.	ED. PHYS.
SCIENCES HUMAINES (Social Studies)	GÉOGRAPHIE (Geography)	HISTOIRE (History)	ANY 1 ADDITIONAL GRADE 12 LEVEL COURSE FOR GRADUATION
SCIENCES	SCIENCES		
OPTIONS	OPTIONS	OPTIONS	OPTIONS

#### \*Students take two French courses in Grade 9.

French Immersion students must register for all compulsory courses in French. Ecole secondaire Kelvin French Immersion students are very fortunate that our program offers all compulsory courses in French. It is to each student's benefit to develop their French language skills and to maximize their French language experience. In September 2024, the Province of Manitoba increased the total number of required French Immersion courses from 14 to 15 credits.

The French Immersion Program at Ecole secondaire Kelvin High School provides an enriching language program for those who wish to develop their bilingual abilities. The program first began at Kelvin in 1978 where graduates averaged seven high school French credits. Today, Kelvin's French Immersion students are able to complete their high school diploma by taking seventeen or more courses in French! Being in French Immersion means committing to the daily opportunity of using their language skills in every French Immersion classroom.

#### ENGLISH

The study of English Language Arts enables each student to understand and appreciate language and to use it competently and confidently in a variety of situations for communication and personal satisfaction. In English class, students develop as learners and individuals through the language arts and through a diverse and rewarding selection of literature.

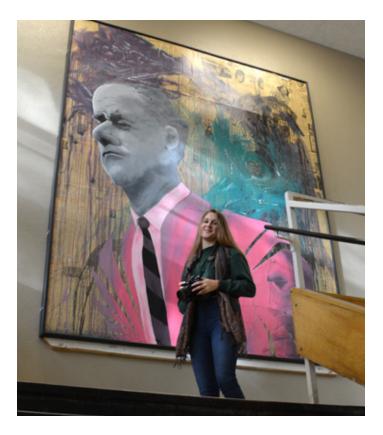


Kelvin's English program explores all aspects of the Manitoba English Language Arts curriculum, and places emphasis on the study of literature, independent reading, and the creation of thoughtful annotations and marginalia. Students are asked to bring self-selected reading material to every class, and they are asked to read with a pen or a pencil in hand.

When children read for pleasure, when they get "hooked on books," they acquire, involuntarily and without conscious effort, nearly all of the so-called language skills many people are so concerned about: they will become adequate readers, acquire a large vocabulary, develop the ability to understand and use complex grammatical constructions, develop a good writing style, and become good (but not necessarily perfect) spellers.

- Stephen D. Krashen





#### **ENGLISH 9**

Students must complete **two full semesters of English 9** for their *compulsory* English 9 credit. One exception is that students enrolled in **Kelvin's French Immersion program** will take English 9 for only one semester. Thus, when completing the application form, students select ONE of the following:

#### English 9 – ENGR1F

English 9 is a course that challenges students to become more mature and more competent in their use of the language arts of reading, writing, listening, speaking, viewing and representing. The course will include a variety of Transactional forms, which focus on pragmatics and communication, as well as Literary forms, which focus on aesthetic pleasure and artistry. At Kelvin, English classes emphasize developing strong habits of mind through the study of literature, independent reading, and the creation of thoughtful annotations and marginalia (writing in the margins).

#### English 9 Immersion – ENGF1F

This course covers the essential outcomes to the regular English 9 course with the exception that the course is in one semester.



#### **ENGLISH 10**

Students must complete **two full semesters of English 10** for their *compulsory* English 10 credit. One exception is that students enrolled in **Kelvin's French Immersion program** will take English 10 for only one semester. Thus, when completing the application form, students select ONE of the following:

#### English 10 – ENGR2F

ENGR2F – 2 Credits for English Academic Program

ENGR2F – 1 Credit for French Immersion Program

English 20F is a foundations course that studies a variety of fiction and non-fiction literature such as novels, plays, poetry, articles and digital forms. The course is designed to enhance students' basic skills acquired in the foundations course, emphasis is given to reading and writing. Students will participate in both group and individual work environments.

#### English 10 Immersion – ENGF2F

This course covers the essential outcomes to the regular English 10 course with the exception that the course is in one semester.

#### ENGLISH 11 and 12

At Kelvin, students select Literary or Transactional courses for grade11 and grade 12. In both courses students will be expected to read extensively and to write extensively.

#### **ENGLISH 11**

**English 11 Literary focus – ENGL3S** Prerequisite: English 10

In the **Literary** focus, students study traditional literature (novels, short stories, poetry and drama, including Shakespeare) and some non-fictional material. Through literary and transactional approaches are part of the curriculum, in the **Literary** courses, assignments place more emphasis on the aesthetic aspects of language and literature.

#### **English 11 Transactional focus – ENGT3S** Prerequisite: English 10

In the **Transactional** focus, students study traditional literature (novels, short stories, poetry and drama, including Shakespeare) as well as non-fictional material. Through transactional and literary approaches are part of the curriculum, in the **Transactional** courses, assignments place more emphasis on the pragmatic aspects of language and literature.

NOTE: Students may choose to take both courses, though only one credit is needed at the grade 11 level.



### ELA: Comprehensive 30S and Canadian History – ENGC35/HISR3F

This is an interdisciplinary course that will examine Canadian History through the application of historical thinking concepts and skills associated with Comprehensive English simultaneously. Students will use Transactional and literary forms to demonstrate an understanding that Canada's past has an impact on the community we live in today and has influenced the relationships of Canadians with one another and within the global community. This course will allow many opportunities for hands-on experiences, guest speakers and field trips to further enhance student understanding and engagement. Students with a keen interest in History or writing will enjoy this course."

#### ENGLISH 12

Students are required to take ONE credit of English 12:

#### English Literary Focus – ENGL4S

Prerequisite: Grade 11 transactional or literary

This course is designed for students who enjoy working with traditional literature (novels, short stories, poetry and plays, including Shakespeare) and non-fictional, transactional materials. Assignments will include both literary and transactional approaches with a focus on aesthetic texts and writing.

### OR

#### **English Transactional Focus – ENGT4S** Prerequisite: Grade 11 transactional or literary

This course is designed for students who want to work with an emphasis on non-fictional material (e.g. feature articles, news reports, editorials, proposals) and traditional literature (novels, plays, short stories, poetry). Assignments will include both transactional and literary approaches. The focus is on pragmatic texts and writing.



# **ELECTIVE COURSES**

#### Grade 12 Specialized Communications ENTS4S – 1 Credit

This course emphasizes the specialized communication process found in contemporary professional practice. There is an emphasis on collaboration and teamwork through exploration and design. Specialized communications will infuse both creative and professional writing with effective communication techniques expected in today's corporate environment. The materials used in this course draw from a variety of sources such as digital and social media platforms, current media publications, documents and manuals.

#### Grade 12 Academic Writing; University Prep ENCS4S – 1 Credit

This course emphasizes the academic communication processes of reading and writing found in the post-secondary environment. The focus of the course is to transform high school writing into the formal expository style of writing required for success in postsecondary institutions. The materials used in this course draw from a variety of sources such as interviews, manuals, research journals and documents.

#### MATHEMATICS

All students must obtain a credit in Grade 9 math before proceeding to any other math courses. The courses beyond Grade 9 are at Grade 10, 11, and 12 levels and are separated into three possible graduation streams: Applied, Essential and Pre-Calculus. The intent of each of these streams is described below:

#### A scientific calculator is needed for the Grade 9 Mathematics course.

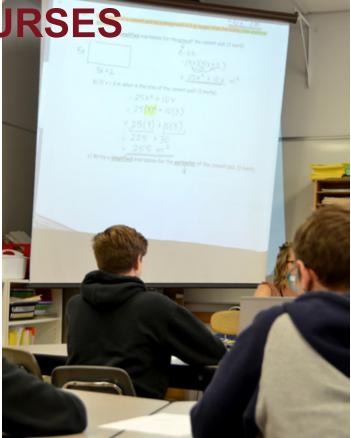
#### Mathematics Foundations 9 – MATR1F

This course is the continuation of the grade 8 Mathematics Foundations course. The central focus of this course is problem solving to understand mathematical concepts and skills. Reasoning, communicating, visualizing, estimating and making connections between mathematical ideas are all emphasized. The topics included are: Rational Numbers, Powers and Exponents, Polynomials, Linear Relations, Equations and Inequations, and Statistics and Probability. This is a full-year course, taken every day.

### Intro to Applied and Pre-Calculus Mathematics 10 – IAPR2S

(mark of at least 70% in MATR1F highly recommended)

This course is intended for students considering post-secondary studies that require a math prerequisite. This course provides students with the mathematical understanding and criticalthinking skills that are required for specific postsecondary programs. Topics are both context driven and algebraic in nature, and include Linear Functions, Trigonometry, Roots and Powers, Polynomials and Factoring. Students will engage in experiments and activities that include the use of technology, problem solving, mental mathematics, and theoretical mathematics to promote the development of mathematical skills. This course is a prerequisite for both the Applied and Pre-Calculus streams.



#### **Essential Mathematics 10 – ESMR2S**

This course is intended for students whose postsecondary planning does not include a focus on mathematics and science-related fields. This course emphasizes consumer applications, problem solving, decision making and spatial sense. Topics include: 2-D Geometry, Measurement, Personal Finance, Trigonometry, Consumer Decisions, Transformations, Angle Construction, Analysis of Games and Numbers. This course is a prerequisite for Grade 11 Essential Mathematics.

#### MATHEMATICS STREAMS

Check with the Guidance department to ensure prerequisites are met for your chosen postsecondary program. Note that some faculties require a minimum grade in the Pre-Calculus Mathematics 12 course for admission.

#### **ESSENTIAL MATHEMATICS 11/12**

This stream is for students who are not intending to pursue further math-related studies after graduation. These courses meet the requirements for high school graduation and for general admission at any Manitoban university. Note that out-of-province universities may not recognize this stream for admission.

#### **APPLIED 11/12**

This stream stresses applications of mathematics and uses graphing calculators, computers and other smart devices to support learning. Students will build on foundations learned in the Intro to Applied and Pre-Calculus 10 course by placing theory in a real-world context. While this stream is not as theoretical as the Pre-Calculus stream, it can still be demanding. A smart phone or tablet is strongly recommended for use in this course as apps will be used throughout. Note: The Applied Math stream is accepted for university admission in many faculties but not for programs requiring the study of calculus.

#### PRE-CALCULUS 11/12

This advanced stream is for students intending to pursue post-secondary studies what will require the study of theoretical calculus or other higher-level math courses. It is accepted by all universities and colleges for admittance to all faculties. Good work habits and a solid understanding of math topics up to grade 10 are crucial for success in this stream.



#### **Essential Mathematics 11 – ESMR3S**

This course is intended for students whose postsecondary planning does not include a focus on mathematics and science-related fields. Grade 11 Essential Mathematics builds on knowledge and skills of Grade 10 Essential Mathematics. Topics include: Analysis of Games and Numbers, Interest and Credit, 3-D Geometry, Statistics, Managing Money, Relations and Patterns, Trigonometry and Design Modelling.

#### Applied Mathematics 11 – APMR3S

This course is intended for students considering post-secondary studies that do not require a study of theoretical calculus. It is context driven and promotes the learning of numerical and geometrical problem-solving techniques as they relate to the world around us. Grade 11 Applied Mathematics builds upon the foundation knowledge and skills from Grade 10 Introduction to Applied and Pre-Calculus Mathematics. Technology is an integral part of both learning and assessment in Applied Mathematics. A smart phone or tablet is strongly recommended for use in this course as apps will be used throughout. Topics include: Measurement, Geometry, Logical Reasoning, Statistics, Relations and Functions.

#### Pre-Calculus Mathematics 11 – PCMR3S

(mark of at least 70% in IAPR2S highly recommended)

This advanced course is designed for students who intend to study calculus and related mathematics as part of post-secondary education. This course is a high-level study of theoretical mathematics with an emphasis on problem solving and mental mathematics. Topics include: Quadratic Functions and Equations, Trigonometry, Rational Expressions and Equations, Radical Expressions and Equations, and Sequences and Series.

#### MATHEMATICS

#### Essential Mathematics 12 – ESMR4S

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in everyday life in a technological society. Topics include: Analysis of Games and Numbers, Vehicle and Home Finance, Statistics, Geometry and Trigonometry, Precision Measurement, Business Finance, Career Life, and Probability.

#### Applied Mathematics 12 – APMR4S

This course is intended for students considering post-secondary studies that do not require a study of theoretical calculus. Technology is an integral part of both learning and assessment in Applied Mathematics. A smart phone or tablet is strongly recommended for use in this course as apps will be used throughout. Topics include: Financial Mathematics, Logical Reasoning, Probability, Relations and Functions, and Design and Measurement.

#### Pre-Calculus Mathematics 12 – PCMR4S

(mark of at least 70% in PCMR3S highly recommended)

This course is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It builds on topics studied in Pre-Calculus Mathematics 11 and provides background knowledge and skills for the study of calculus. Topics include: Transformations and Functions, Trigonometric Functions, Exponential Functions, Logarithmic Functions, Rational Functions, Radical Functions, Rational Functions, and the Bionomial Theorem. A scientific calculator is required. A graphing calculator is not permitted on tests and exams.

#### Advanced Mathematics 12 - AM2R4S Pre-/Co-requisite: PCMR4S

This course studies higher-level math concepts from a variety of non-calculus topics such as vectors, statistics and probability, and complex numbers. Topics may also be chosen based on student interest. It is highly recommended for students who are particularly interested in mathematics and/or those who intend to specialize in math-related fields such as calculus at university. This course is not a required prerequisite for university mathematics studies in Manitoba, but will help students with the transition to university mathematics. This is a half credit course that will be offered every second day in Semester 1; it is a recommended prerequisite, not a requirement, for the Semester 2 Introduction to Calculus and Advanced Mathematics course.

#### Introduction to Calculus and Advanced Mathematics 12: CALR4S /ADMR4S Prerequisite: PCMR4S or PCMF4S

This course studies higher-level math concepts from differential and integral calculus, such as limits, derivatives, function analysis, and integrals, as well as other topics such as conics, proofs, and number theory. It is highly recommended for students who are particularly interested in mathematics and/or those who intend to specialize in math-related fields such as calculus at university. Topics may include functions, limits, derivatives, integrals, and the Fundamental Theorem of Calculus. This course is not a required prerequisite for university mathematics studies in Manitoba, but will help students with the transition to university mathematics, and may be required in other provinces. Students may have the opportunity to challenge the University of Manitoba Calculus course for a university credit. This course will be offered in Semester 2; it is recommended, but not required, to also register for the Semester 1 Advanced Mathematics (AM2R4S) course. When registering for this course choose course code CALR4S.

## **MATHEMATICS INFORMATION**

#### MATHEMATICS INFORMATION

One math credit is required at each grade level from 9 to 12. Other credits obtained are complementary. Use of a scientific calculator is allowed in all Mathematics courses, but calculator use may be limited in the Pre-Calculus stream. Calculators with statistics functions and graphing capabilities are especially useful in the Applied Courses.



#### **MATHEMATIC ENRICHMENT & CONTESTS**

The math department provides opportunities for mathematically talented students to participate in the following math competitions:

- Canadian Senior Mathematics Contest (Gr. 12) (November) – University of Waterloo
- Canadian Intermediate Mathematics Contest (Gr. 9 & 10) (November) – University of Waterloo
- Pascal (Gr. 9), Cayley (Gr. 10), Fermat (Gr. 11) (February) – University of Waterloo
- University of Manitoba (Gr. 12) (February)
- Euclid (Gr. 12) (April) University of Waterloo
- Fryer (Gr. 9), Galois (Gr. 10), Hypatia (Gr. 11) (April) – University of Waterloo



### USE OF CALCULATOR IN UNIVERSITY CALCULUS

Be aware that most universities do not allow calculators to be used on any of their tests or exams (University of Manitoba, for example). You would be advised to prepare yourself in your Grade 10, 11 and 12 Pre-Calculus courses by practicing problems that do not involve calculator use. Such problems have answers that are exact or purely symbolic.

#### SCIENCES

Science is compulsory in grade 9 and 10. These courses include theories, models, concepts, and principles that help students develop an understanding of each of the following areas of science: life science, physical science, and Earth and space science.

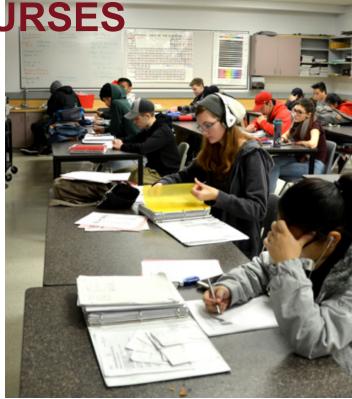
#### Science 9 – SCIR1F

This course is an introduction to the areas of life science (Reproduction), physical science (Atoms and Elements and The Nature of Electricity), and Earth and space science (Exploring the Universe). Students will develop critical thinking skills while gaining the background knowledge to prepare them for the Grade 10 science course. An introduction to laboratory experience and development of an understanding of the processes of science are desired outcomes for this course. This credit is compulsory.

#### Science 10 – SCIR2F

Prerequisite: Science 9

This course continues the study of science in the areas of life science (Dynamics of Ecosystems), physical science (Chemistry in Action and In Motion), and Earth and space science (Weather Dynamics). This course prepares students to make informed decisions about science course selection for Grade 11 and 12. Further development of student laboratory and critical thinking skills, as well as an understanding of the role of science in society are also fostered in this course. This credit is compulsory.





#### Biology 11 - BIOR3S

Prerequisite: Science 10

The grade 11 biology course looks at the structure and function of human physiology. The topics studied include the circulatory system, respiratory system, digestive system, excretory system and nervous system with a theme of wellness and homeostasis throughout each unit. Students will learn how the body systems are integrated and investigate aspects of health and wellness.

#### **Biology 12 – BIOR4S**

Prerequisite: Science 10

The grade 12 biology course is designed to connect concepts from biological inheritance to the diversity of life on Earth. Topics covered include the molecular basis of the structure and function of DNA and Protein, related societal and ethical issues, observable patterns of genetic inheritance, evolutionary theory and how scientists organize and classify the diverse forms of life. Completion of Biology 11 is recommended.

#### Chemistry 11 – CHER3S

Prerequisite: Science 10

This course builds on the foundation of chemistry acquired through the grade 9 and 10 science courses. The curriculum includes the structure and properties of matter, with a focus on how matter interacts. Students are expected to apply theory as well as complete mathematical problem solving using algebra. Laboratory practical skills will continue to be developed. Topics include: the properties of the states of matter, mathematical relationships in chemical reactions, gas laws, solution chemistry and organic chemistry.

#### Chemistry 12 – CHER4S

Prerequisite: Chemistry 11

This course continues to build upon the concepts from Chemistry 11 with a focus on application of theory and algebraic calculations for chemical reactions. Through participation in experiments students will develop skills for the safe handling of chemicals as well as observation and measurement skills. This course is designed to prepare students for further study in chemistry and to develop abilities that enable them to be informed decision makers who understand the role of chemistry in the world around them. Topics covered include atomic structure, chemical kinetics, electrochemistry and chemical equilibrium applied to solutions and acid-base reactions.

#### Physics 11 – PHYR3S

Prerequisite: Science 10

This course will appeal to students who enjoy applying problem-solving to real world situations. Topics studied in-depth include measurement and linear motion. Wave theory will be introduced through the study of light and sound. The field concept is explored in electric, magnetic and gravitational contexts. At this level students will need a strong background in equation solving and trigonometry.

#### Physics 12 – PHYR4S

Prerequisite: Physics 11

In this course, students complete their study of mechanics with the following topics: dynamics of circular motion, projectile motion, momentum and energy. This is followed by a detailed analysis of electricity and magnetism and an introduction to modern physics, through topics applicable to medical physics.

#### **Current Topics in Science – CTSR3S**

Current Topics in Science deals with current applications, scientific events, discoveries or issues that are science based in today's world. Rather than focus on a specific discipline (Biology, Chemistry or Physics), this course integrates a variety of science disciplines to examine the science that is current in an engaging and relevant manner. This course emphasizes more of a hands-on and project based approach and is recommended for students that are interested in expanding their understanding of the role of science in our society and an opportunity for enriching their knowledge in science issues current and relevant to our lives.

#### SOCIAL STUDIES

Social studies courses are compulsory for grade 9 Social Studies, grade 10 Geography and grade 11 Canadian history. All other social studies courses are electives.



#### Social Studies 9 – SOSR1F

This course is a contemporary study of issues affecting Canada today. The course examines themes including: diversity, pluralism, democracy and governance, Canada and the global context, and opportunities and challenges for our country. The course content will range from historical events to contemporary issues using classroom strategies such as mock parliament, a criminal trial, various hands-on activities, research and presentations.

#### Geography 10 – GEOR2F

The course takes a national look at North America and moves toward a local study of Canada and its role in the global community. The areas of focus are: geographic literacy, natural resources, food from the land, industry and trade, and urban places. The course begins with basic geographical skills and ends with a look at the various industries and their impact economically and environmentally.



#### History 11 – HISR3F

Canadian History is taught chronologically. Subjects that are covered are: Native peoples and immigration, colonial societies, government, Confederation, industrialization, Western Canada, and Canada's place in the world. Shaping Canada, the textbook, is both a political and social history. Some topics will relate to present day situations and concerns in Canada such as: separatism in Quebec, regionalization, and Indigenous self-government.

#### PHYSICAL EDUCATION

#### Physical Education 9 – PHER1F

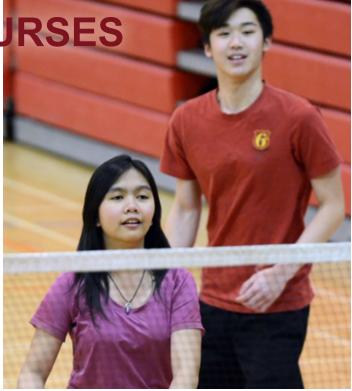
Grade 9 Physical Education is a full year course with students attending PE every second day. The aim of the curriculum is to provide students with planned and balanced programming to develop the knowledge, skills, and attitudes for physically active and healthy lifestyles.

Physical Education activities include team and individual activities and there is a strong emphasis on individual fitness development. Health related topics include: fitness planning, addictions awareness, healthy relationships and reproductive health.

#### Physical Education 10 – PHER2F

This compulsory full-credit course is designed to help youth explore a wide range of activities that include both individual and team concepts. Students will be given the opportunity to identify activities that they would enjoy and incorporate into an active lifestyle in their futures. Students will study topics related to fitness management and planning, nutrition, first aid, substance use and abuse prevention, reproductive health and social issues in sport.





### All-gendered non-gendered Health and Physical Education – Grade 10 – PEFR2F

This physical education course promotes inclusive active learning spaces to support all gendered students who wish to participate in a non-competitive fitness experience. Students will have the opportunity to explore fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Additional topics related to nutrition, first-aid, substance use and abuse prevention, reproductive health and social issues in sport may be explored.

Active Healthy Lifestyles (General) English Program 11 – PHER3F French Immersion Program 11 – PHEF3F

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles now and in the future. Students will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport. The focus of this content will be on health and personal planning. These topics will make up the core 25% in-class component of the course content. For the remaining 75% of the course, students will be required to develop and implement, on their own time, a personal physical activity plan as part of a physical activity practicum. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. As part of earning a credit for this course, students will be required to submit a personal fitness portfolio containing elements such as a fitness plan, physical activity log, and journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation. This course is available in French for French Immersion Students.

NOTE: Parents/guardians will be required to review and verify their child's physical activity plan and sign a **Parent Declaration and Consent Form** acknowledging their approval of the chosen activities and acceptance of the responsibility for risk management, safety, and supervision.

#### Active Healthy Lifestyles (Personal Fitness)

#### English Program 12 – PHER4F

#### French Immersion Program 12 – PHEF4F

This compulsory full-credit course is an extension of the 30F Active Healthy Lifestyle course designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles now and in the future. Students will study topics related to fitness management, nutrition, sexual health, social/ emotional health, and personal development. The focus of this content will be on health and personal planning. These topics will make up the core 25% inclass component of the course content.



For the remaining 75% of the course, students will be required to develop and implement, on their own time, a personal physical activity plan as part of a physical activity practicum. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. This course is available in French for French Immersion Students.

As part of earning a credit for this course, students will be required to submit a personal fitness portfolio containing elements such as a fitness plan, physical activity log, and journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation.

NOTE: Parents/guardians will be required to review and verify their child's physical activity plan and sign a **Parent Declaration and Consent Form** acknowledging their approval of the chosen activities and acceptance of the responsibility for risk management, safety, and supervision.

#### **KELVIN ACTIVE LIVING CENTER**

Kelvin's Active Living Center is a wonderful space that is used by students on a daily basis. The ALC is used by grade 9 & 10 classes during the fitness unit and for grade 11 & 12 classes as a great teaching space for the independent activity requirement for their course. Memberships are available to purchase for students who want to use the space during lunch hour and other times throughout the school day, based on class availability. The ALC is a fantastic new space that is well used and welcomes hundreds of students every day to enrich their learning as well as their physical and mental health.

### FRENCH IMMERSION DIPLOMA PROGRAM

The French Immersion program provides students with an on-going challenge to learn French, not only as a language but also as a tool for learning. All teachers in the Immersion program are language teachers as well as content area teachers. Therefore, the student's task becomes learning the subject matter as well as the language needed to function in that area.

#### **OUR PRIORITIES**

All French Immersion teachers believe that oral literacy is a priority. A major outcome of the program is to be functionally bilingual at the end of high school. With this in mind, the teachers have put in place a number of initiatives to encourage the use of French within the classroom.

#### FRENCH LANGUAGE COMMITMENT

All students who enter the French Immersion Diploma program will be asked to commit to speaking French in class with their teachers and peers. The French language is the primary language of communication in all immersion classes.

#### REGISTRATION

French Immersion students **must** register for all compulsory courses in French. École secondaire Kelvin French Immersion students are very fortunate that our program offers all compulsory courses in French. It is to each student's benefit to develop their French language skills and to maximize their French language experience. In September 2024, the Province of Manitoba increased the total number of required French Immersion courses from 14 to 15 credits.

#### **PROGRAM CHOICES (Grades 10-12)**

Students are able to obtain the French Immersion Diploma while taking **International Baccalaureate** courses. For students who may be considering the IB programme after Grade 9, staying in the French Immersion program until the end of Grade 9 is beneficial as it offers students more confidence in IB French courses. French Immersion students who remain in the French Immersion program may choose to take IB courses in Grades 11-12 to earn IB course results.



#### **DIGITAL TOOLS**

Today's digital world has changed teaching and there are many on-line tools available to facilitate second-language learning. At École secondaire Kelvin High School second-language acquisition means students are constructing and interacting with the language at all levels and entry points of their assignments. Therefore, the following digital tools are recommended to support student learning for all our language programs:

WordReference.com – an excellent online dictionary for Spanish and French

Bonpatron.com – a proofreading tool with spell check and grammar check

SpanishChecker.com - a proofreading tool with spell check and grammar check

Translation tools are not acceptable language/ learning software/tools. Chat GPT and other Al tools such as programs like Google Translate, with ready-made answers which require no evaluation or intellectual participation are not acceptable. The student is submitting work that is not their own which is considered plagiarism. In addition, these tools often only provide a literal word for word translation, often incorrect or illogical. Students who make use of these tools are not displaying academic honesty.

## LE PROGRAMME D'IMMERSION

Le programme d'immersion à l'École secondaire Kelvin existe depuis 1978. Aujourd'hui, notre programme bat son plein avec une bonne fréquentation en immersion courte et immersion longue. Cours préparatoire: le cours d'immersion pré-secondaire longue ou courte ou son équivalent. Les cours d'immersion sont offerts aux élèves voulant améliorer leurs compétences en français et désirant développer davantage leur niveau de bilinguisme.

On doit remarquer que:

- i. tout élève doit réussir un minimum de 15 crédits en français afin d'atteindre le diplôme bilingue; toutefois, on peut choisir plus de 17 cours.
- ii. un élève peut choisir de suivre 70% de ses cours au secondaire en français.
- iii. étant donné l'objectif linguistique du programme, tout élève s'engage à utiliser uniquement le français à l'intérieur de ses classes. L'élève entrant dans le programme d'immersion aura ses cours obligatoires délivrés en français.
- iv. puisque les activités culturelles font partie d'un programme d'acquisition de la langue, on s'attend à ce que les élèves aident à défrayer les coûts de ces activités. Celles-ci permettent aux élèves de développer une conscience et une appréciation de la culture francophone et leur donnent l'occasion d'utiliser la langue dans un contexte non-académique.

9E ANNÉE	10E ANNÉE	11E ANNÉE	12E ANNÉE
FRANÇAIS	FRANÇAIS	FRANÇAIS	FRANÇAIS
ELA	ELA	ELA	ELA
MATHÉMATIQUES	MATHÉMATIQUES	MATHÉMATIQUES	MATHÉMATIQUES
PHYS. ED.	PHYS. ED.	ED. PHYSIQUE	ED. PHYSIQUE
SCIENCES	SCIENCES		
SCIENCES HUMAINES	GÉOGRAPHIE	HISTOIRE	PLUS 2 COURS AU NIVEAU 40 POUR ÊTRE DIPLÔMÉ

### NOTEZ : les élèves de 11e et 12e année doivent avoir un minimum de 3 crédits en français au niveau 30 et 40.

Deux crédits de français sont nécessaires en 9e année.

Les élèves en immersion doivent prendre les cours obligatoires en français. Il est important de suivre tous les cours en français afin de développer les compétences langagières.

## FRENCH IMMERSION PROGRAM

The **French Immersion Program** at Ecole secondaire Kelvin High School provides an enriching language program for those who wish to develop their bilingual abilities. The program first began at Kelvin in 1978 where graduates averaged seven high school French credits. Today, Kelvin's French Immersion students are able to complete their high school diploma by taking seventeen or more courses in French! Being in French Immersion means committing to the daily opportunity of using their language skills in every French Immersion classroom.

Students entering the French Immersion program at Kelvin must be aware of the following:

- i. a minimum of 15 credits in French must be successfully completed in order to receive the Provincial French Immersion Diploma as prescribed by the government of Manitoba.
- ii. the opportunity exists to complete up to 70% of their Secondary Program in French.
- iii. in view of the linguistic objectives of the program, students must commit themselves to the exclusive use of French in **all** Immersion classes.
- iv. given that an important part of the language acquisition is exposure to and participation in outof-school activities in the target language, we ask students to contribute towards the cost of the cultural activities program. Not only are these activities an extension of the français courses, but they allow students to develop an awareness and appreciation of the culture of French-speaking people and provide opportunities for students to enrich their linguistic skills in a non-academic context.

GRADE 9	GRADE 10	GRADE 11	GRADE 12
FRANÇAIS	FRANÇAIS	FRANÇAIS	FRANÇAIS
ELA	ELA	ELA	ELA
MATHÉMATIQUES	MATHÉMATIQUES	MATHÉMATIQUES	MATHÉMATIQUES
PHYS. ED.	PHYS. ED.	ED. PHYSIQUE	ED. PHYSIQUE
SCIENCES	SCIENCES		
SCIENCES HUMAINES (Social Studies)	GÉOGRAPHIE (Geography)	HISTOIRE (History)	2 ADDITIONAL GRADE 12 LEVEL COURSES FOR GRADUATION*

#### Please note: Students must have a minimum of 3 credits in French at the Grade 11 and 12 levels.

The two French language course credits are compulsory in grade 9.

French Immersion students must register for all compulsory courses in French. École secondaire Kelvin French Immersion students are very fortunate that our program offers all compulsory courses in French. It is to each student's benefit to develop their French language skills and to maximize their French language experience.

In September 2024, the Province of Manitoba increased the total number of required French Immersion courses from 14 to 15 credits.

#### Français 9 – FILF1F/FICF1F

Les élèves seront capables d'interagir avec une gamme de textes, tels que des contes, des histoires autochtones, des faits divers, des lettres, des chansons, des poèmes, des publicités et des romans, selon une double perspective : analyse du fonctionnement textuel et réaction critique.

This course will expose students to a number of different kinds of texts, including folk tales, news items, letters, songs, poetry, advertisements and novels. Students will be introduced to textual analysis and critical thinking.

#### Français en situation 9 – FESY1G

Ce cours offre un programme d'approfondissement permettant aux élèves d'appliquer ce qu'ils ont appris dans l'élaboration de projets flexibles. Le travail autonome et coopératif sera valorisé dans le but d'encourager les élèves à accepter le défi de ce cours axé sur la créativité et l'expression orale.

This course complements français (FILF1F/ FICF1F), allowing students to apply what they have learned and to use those skills in a series of open-ended projects. Students are encouraged to work autonomously and cooperatively while integrating creativity and developing oral expression skills.



#### Français 10 – FRAF2F

Les élèves seront capables d'analyser divers textes tels que des pièces de théâtres, nouvelles, courts articles, lettres ou textes d'opinion. Les élèves seront capables de distinguer les faits, les opinions, les hypothèses dans des textes oraux. Ils seront également capables de rédiger des textes pour transmettre de l'information selon son intention de communication ou pour satisfaire un besoin esthétique.

This course is designed to develop second language skills through the study of literary as well as non-literary works. Students will study the various aspects of communication in oral and written activities. They will continue to learn how to use the language to report, to persuade, to analyze, to express opinions, and to be creative.

#### Français 11 – FRAF3S

Les élèves seront capables d'interagir avec une gamme de textes, tels que des reportages, des textes analytiques, des textes argumentatifs, des films, des pièces de théâtre, des romans, selon une double perspective: analyse du fonctionnement textuel et réaction critique. Les élèves seront par ailleurs capables, entre autres, de présenter et de défendre leur point de vue avec efficacité ainsi que de saisir l'essentiel du contenu d'un texte.

In this course, students will study both literary and non-literary works, such as reports, analytical and argumentative texts, films, plays, and novels. They will be taught to present and defend their point of view and to write with precision.

#### Français 12 – FRAF4S

Les élèves seront capables d'interagir avec une gamme de textes, tels que des reportages, des entrevues, des documentaires, des textes analytiques, des textes argumentatifs, des dossiers, des films, des pièces de théâtre, des chansons, des nouvelles littéraires, des romans et des textes poétiques selon une double perspective: analyse du fonctionnement textuel et réaction critique s'appuyant sur les éléments pertinents du texte. Les élèves seront par ailleurs capables de créer des effets dans leurs productions orales et écrites, de faire une présentation orale à caractère formel, soutenue par des moyens techniques, de rédiger des textes argumentatifs et/ou analytiques.

This course will expose students to a variety of different kinds of texts, including reports, interviews, documentaries, analytical and argumentative texts, portfolios, films, plays, songs, short stories, novels and poetry. Students will be required to make formal oral presentations and to write in a variety of styles and forms.

#### Sciences humaines 9 – SCHF1F

Le programme d'étude est intitulé « Le Canada dans le monde contemporain ». Il comprend une étude du Canada actuel, et les questions qui l'affectent aujourd'hui, ainsi que ses rôles variés dans le monde contemporain. L'élève examinera les thèmes tels que la diversité et le pluralisme dans notre société, la démocratie et notre gouvernement, le droit, la consommation, la mondialisation, et les défis pour l'avenir du Canada.

A contemporary study of issues affecting Canada today, as well as its changing role in today's world. The course examines themes including diversity, multiculturalism, democracy, law and government, globalization and challenges facing Canada today and in the future.

#### Géographie 10 - GEOF2F

Ce cours représente une étude des questions et des enjeux géographiques au XXIe siècle affectant non seulement le Canada mais la planète entière. Le but est d'examiner les relations entre les humains et leur environnement, comme l'on peut en retrouver dans les villes, les industries et les zones agricoles. On développera les principes de base de la géographie.

This course is the study of 21st century geographic issues affecting the planet and Canada in particular. The objectives are to examine the relationship between humans and their environment with respect to urban, industrial and agricultural practices. Basic geographical principles will be developed.

#### Histoire 11 – HISF3S

Ce cours est un survol de l'histoire du Canada, de la préhistoire jusqu'à l'époque moderne. Le cours comprend plusieurs thèmes, dont

1) les peuples Autochtones

- 2) l'héritage colonial
- 3) les relations franco-anglaises
- 4) le Nord-ouest
- 5) le rôle international du Canada
- 6) la justice sociale

Chaque thème est exploré depuis ses origines jusqu'à l'époque contemporaine.

This is a survey course in Canadian history which covers everything from neolithic times to the present. A chronological approach is used to study topics such as:

- 1) Indigenous peoples
- 2) Canada's colonial origins
- 3) French/English relations
- 4) The North-West
- 5) Canada's global role
- 6) Social Justice

Each aspect of Canadian History is examined as it changes over time.

#### Mathématiques 9 – MATF1F

Ce cours est la suite du cours de Mathématiques 8. Le but central de ce cours est la resolution de problèmes pour comprendre les concepts et les habiletés mathématiques. On mettra l'emphase sur le raisonnement, la communication, la visualisation, l'estimation, et l'établissement des liens entre les idées mathématiques. Les sujets inclus sont: les nombres rationnels, les puissances, les polynômes, les relations linéaires, les équations et les inéquations, la statistique et la probabilité. C'est un cours d'une année complète, pris tous les jours.

This course is the continuation of the grade 8 Mathematics Foundations course. The central focus of this course is problem solving to understand mathematical concepts and skills. Reasoning, communicating, visualizing, estimating and making connections between mathematical ideas are all emphasized. The topics included are: Rational Numbers, Powers and Exponents, Polynomials, Linear Relations, Equations and Inequations, and Statistics and Probability. This is a full year course taken every day.

#### Mathématiques au quotidien 10 – MAQF2S

Ce cours est conçu pour des élèves dont les études post-secondaires ne nécessiteront pas une étude approfondie des mathématiques et des domaines scientifiques. Ce cours met l'accent sur des applications de finances, la résolution de problèmes, la prise de décision et le sens spatial. Les sujets incluent: la géométrie 2-D, la mesure, les finances personnelles, la trigonométrie, les decisions du consommateur, les transformations, les angles, et l'analyse des jeux.

This course is intended for students whose post- secondary planning does not include a focus on mathematics and science-related fields. This course emphasizes consumer applications, problem solving, decision making and spatial sense. Topics include: 2-D Geometry, Measurement, Personal Finance, Trigonometry, Consumer Decisions, Transformations, Angle Construction, Analysis of Games and Numbers. This course is a pre-requisite for grade 11 Essential mathematics.

# FRENCH IMMERSION COURSES

#### Mathématiques au quotidien 11 – MAQF3S

Le cours de mathématiques au quotidien 30S a été conçu pour des élèves dont les études postsecondaires ne nécessiteront pas une étude approfondie des mathématiques. Ce cours se fonde sur les habilités et connaissances acquises durant le cours de mathématiques au quotidien de 10e année. Les sujets abordés mettent l'accent sur des applications de finances, la prise de décision et le sens spatial. Les sujets incluent: l'analyse des jeux, le crédit et l'intérêt, la géométrie 3-D, la statistique, la gestion de l'argent, les relations et les régularités, la trigonométrie, et le design et mesure.

This course is intended for students whose postsecondary planning does not include a focus on mathematics and science-related fields. Grade 11 Essential Mathematics builds on knowledge and skills of Grade 10 Essential Mathematics. Topics include: Analysis of Games and Numbers, Interest and Credit, 3-D Geometry, Statistics, Managing Money, Relations and Patterns, Trigonometry and Design Modelling.

#### Mathématiques au quotidien 12 - MAQF4S

Ce cours est destiné aux élèves qui ne planifient pas poursuivre des études post-secondaires en mathématiques ou dans le domaine des sciences. Il est attendu que les élèves travaillent indépendamment ou en petits groupes sur des concepts et habilités mathématiques quotidiennes. Les sujets incluent l'analyse des jeux, le financement d'une voiture, les finances immobilières, les statistiques, la géométrie et la trigonométrie, la mesure et la précision, les finances d'une entreprise et la probabilité.

This course is intended for students whose post- secondary planning does not include a focus on mathematics and science-related fields. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in everyday life in a technological society. Topics include: Analysis of Games and Numbers, Vehicle and Home Finance, Statistics, Geometry and Trigonometry, Precision Measurement, Business Finance, Career Life, and Probability.



#### Introduction aux mathématiques appliquées et pré-calcul 10 – IAPF2S

(note d'au moins 70% en MATF1F fortement suggérée)

Ce cours est conçu pour les élèves qui envisagent de poursuivre des études postsecondaires nécessitant une étude plus approfondie des mathématiques. Cette voie fournit aux élèves les connaissances mathématiques et les habiletés de pensée critique qui sont nécessaires pour certains programmes post-secondaires. Les sujets abordés sont contextualisés et abstraits, et incluent les fonctions linéaires, la trigonométrie, les radicaux et les puissances, les polynômes et la factorisation. Les élèves mèneront des expériences et poursuivront des activités qui incluent l'utilisation de la technologie, de la résolution de problèmes, du calcul mental et de la théorie pour promouvoir le développement d'habiletés mathématiques. Ce cours est préalable aux voies de précalcul et d'appliqué.

(mark of at least 70% in MATF1F highly recommended)

This course is intended for students considering post-secondary studies that require a math prerequisite. This course provides students with the mathematical understanding and criticalthinking skills that are required for specific postsecondary programs. Topics are both context driven and algebraic in nature, and include Linear Functions, Trigonometry, Roots and Powers, Polynomials and Factoring. Students will engage in experiments and activities that include the use of technology, problem solving, mental mathematics, and theoretical mathematics to promote the development of mathematical skills. This course is a prerequisite for both the Applied and Pre-Calculus streams.

#### Mathématiques appliquées 30S - MAPF3S

Ce cours est suggéré pour les élèves qui planifient poursuivre des études postsecondaires qui ne demandent pas l'étude des mathématiques théoriques. Ce cours demande d'apprendre des habilités de résoudre des problèmes contextuels géométriques et numériques. Le cours est bâti sur les connaissances antérieures qui sont enseignées dans le cours d'introduction aux mathématiques appliquées et précalcul 10 (IAPFS). La technologie est une partie intégrante à la fois de l'apprentissage et de l'évaluation en mathématiques appliquées. Une tablette ou téléphone intelligent est fortement suggéré pour la participation au cours. Les sujets inclus sont : la mesure, la géométrie, le raisonnement logique, les statistiques et les relations et les fonctions.

This course is intended for students considering post-secondary studies that do not require a study of theoretical calculus. It is context driven and promotes the learning of numerical and geometrical problem-solving techniques as they relate to the world around us. Grade 11 Applied Mathematics builds upon the foundation knowledge and skills from Grade 10 Introduction to Applied and Pre-Calculus Mathematics. Technology is an integral part of both learning and assessment in Applied Mathematics. A smart phone or tablet is strongly recommended for use in this course as apps will be used throughout. Topics include : Measurement, Geometry, Logical Reasoning, Statistics, Relations and Functions.

#### Mathématiques appliquées 40S - MAPF4S

Ce cours est suggéré pour les élèves qui planifient poursuivre des études postsecondaires qui ne demandent pas l'étude des mathématiques théoriques. Ce cours demande d'apprendre des habilités de résoudre des problèmes contextuels géométriques et numériques. La technologie est une partie intégrante à la fois de l'apprentissage et de l'évaluation en mathématiques appliquées Les tableurs, les programmes graphiques et autres logiciels seront utilisées durant le cours. Les sujets inclus sont : les mathématiques financières, le raisonnement logique, la probabilité, les relations et les fonctions, la mesure et les projets stylistiques.

This course is intended for students considering post-secondary studies that do not require a study of theoretical calculus. Technology is an integral part of both learning and assessment in Applied Mathematics. A smart phone or tablet is strongly recommended for use in this course as apps will be used throughout. Topics include: Financial Mathematics, Logical Reasoning, Probability, Relations and Functions, and Design and Measurement.

Mathématiques pré-calcul 11 – PCMF3S (note d'au moins 70% en IAPF2S fortement suggéré)

Ce cours avancé a été conçu pour des élèves qui envisagent d'étudier le calcul et de poursuivre des études post-secondaires qui nécessiteront l'étude de calcul. Le cours comprend un haut niveau d'études de mathématiques théoriques, et il est divisé en trois domaines : l'algèbre et le nombre, la trigonomètrie, et les relations et les fonctions. Les sujets incluent les fonctions et les équations quadratiques, la trigonométrie, les expressions et les équations rationnelles, les expressions et les équations radicales, et les suites et séries.

(mark of at least 70% in IAPR2S highly recommended)

This advanced course is designed for students who intend to study calculus and related mathematics as part of post-secondary education. This course comprises a highlevel study of theoretical mathematics with an emphasis on problem solving and mental mathematics. Topics include: Quadratic Functions and Equations, Trigonometry, Rational Expressions and Equations, Radical Expressions and Equations, and Sequences and Series.

**Mathématiques pré-calcul 12 – PCMF4S** (une note d'au moins 70% en PCMF3S est fortement suggéré)

Ce cours est destiné aux élèves qui planifient étudier le calcul et les matières reliées à ce sujet dans leurs études post-secondaires. Les sujets étudiés élaborent les sujets enseignés en précalcul 30S et développent leur compréhension du calcul. Les sujets inclus sont: les transformations, les fonctions trigonométriques, les fonctions exponentielles, les fonctions logarithmiques, les fonctions polynomiales, les fonctions radicales et rationnelles et le théorème du binôme. Une calculatrice scientifique est nécessaire pour le cours.

This course is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It builds on topics studied in grade 11 Pre-Calculus mathematics and provides background knowledge and skills for the study of calculus. Topics include: Transformations and Functions, Trigonometric Functions, Exponential Functions, Logarithmic Functions, Polynomial Functions, Radical Functions, Rational Functions, and the Bionomial Theorem. A scientific calculator is required.

#### Sciences naturelles 9 – SCIF1F

Ce cours est une introduction aux domaines des sciences de la vie (reproduction), des sciences physiques (atomes et éléments et nature de l'électricité) et des sciences de la Terre et de l'espace (exploration de l'univers). Les élèves développeront des compétences de pensée critique tout en acquérant les connaissances de base nécessaires pour se préparer au cours de sciences de 10e année. Une introduction à l'expérience de laboratoire et le développement d'une compréhension des processus scientifiques sont les résultats souhaités pour ce cours. Ce crédit est obligatoire. This course is an introduction to the areas of life science (Reproduction), physical science (Atoms and Elements and The Nature of Electricity), and Earth and space science (Exploring the Universe). Students will develop critical thinking skills while gaining the background knowledge to prepare them for the Grade 10 science course. An introduction to laboratory experience and development of an understanding of the processes of science are desired outcomes for this course. This credit is compulsory.

#### Sciences naturelles 10 – SCIF2F

conditions préalables: sciences naturelles 9 - SCIF1F

Ce cours poursuit l'étude des sciences dans les domaines des sciences de la vie (dynamique des écosystèmes), des sciences physiques (chimie en action et en mouvement) et des sciences de la Terre et de l'espace (dynamique du temps). Ce cours prépare les élèves à prendre des décisions éclairées sur le choix des cours de sciences pour les 11e et 12e années. Le développement ultérieur des compétences de laboratoire et de pensée critique des élèves, ainsi qu'une compréhension du rôle de la science dans la société sont également encouragés dans ce cours. Ce crédit est obligatoire.

This course continues the study of science in the areas of life science (Dynamics of Ecosystems), physical science (Chemistry in Action and In Motion), and Earth and space science (Weather Dynamics). This course prepares students to make informed decisions about science course selection for Grade 11 and 12. Further development of student laboratory and critical thinking skills, as well as an understanding of the role of science in society are also fostered in this course. This credit is compulsory.

### **FRENCH IMMERSION COURSES**

#### Biologie 11 – BIOF3S

conditions préalables: sciences naturelles 10 - SCIF2F

Le cours de biologie de 11e année porte sur la structure et la fonction de la physiologie humaine. Les sujets étudiés incluent le système circulatoire, le système respiratoire, le système digestif, le système excréteur et le système nerveux avec un thème de bien-être et d'homéostasie dans chaque unité. Les étudiants apprendront comment les systèmes corporels sont intégrés et étudieront les aspects de la santé et du bien-être.

The grade 11 biology course looks at the structure and function of human physiology. The topics studied include the circulatory system, respiratory system, digestive system, excretory system and nervous system with a theme of wellness and homeostasis throughout each unit. Students will learn how the body systems are integrated and investigate aspects of health and wellness.

#### Biologie 12 – BIOF4S

conditions préalables: sciences naturelles 10 - SCIF2F

Le cours de biologie de 12e année est conçu pour relier les concepts de l'hérédité biologique à la diversité de la vie sur Terre. Les sujets abordés comprennent la base moléculaire de l'hérédité génétique et les questions sociétales et éthiques, les modèles observables d'héritage génétique, la théorie de l'évolution et la façon dont les scientifiques organisent et classent les diverses formes de vie. Il est recommandé d'avoir terminé Biologie 11.

The grade 12 biology course is designed to connect concepts from biological inheritance to the diversity of life on Earth. Topics covered include the molecular basis of genetic inheritance and related societal and ethical issues, observable patterns of genetic inheritance, evolutionary theory and how scientists organize and classify the diverse forms of life. Completion of Biology 11 is recommended.

#### Chimie 11 – CHEF3S

conditions préalables: sciences naturelles 10 - SCIF2F

Ce cours s'appuie sur les bases de la chimie acquises dans les cours de sciences de 9e et 10e année. Le programme comprend la structure et les propriétés de la matière, en mettant l'accent sur la façon dont la matière interagit. On s'attend à ce que les étudiants appliquent la théorie ainsi que la résolution complète de problèmes mathématiques en utilisant l'algèbre. Les compétences pratiques en laboratoire continueront d'être développées. Les sujets incluent : les propriétés des états de la matière, les relations mathématiques dans les réactions chimiques, les lois des gaz, la chimie des solutions et la chimie organique.

This course builds on the foundation of chemistry acquired through the grade 9 and 10 science courses. The curriculum includes the structure and

properties of matter, with a focus on how matter interacts. Students are expected to apply theory as well as complete mathematical problem solving using algebra. Laboratory practical skills will continue to be developed. Topics include: the properties of the states of matter, mathematical relationships in chemical reactions, gas laws, solution chemistry and organic chemistry.

#### Chimie 12 – CHEF4S

conditions préalables: chimie 11 - CHEF3S

Ce cours continue de s'appuyer sur les concepts de Chimie 11 en mettant l'accent sur l'application de la théorie et des calculs algébriques pour les réactions chimiques. En participant à des expériences, les étudiants développeront des compétences pour la manipulation en toute sécurité des produits chimiques ainsi que des compétences d'observation et de mesure. Ce cours est conçu pour préparer les étudiants à des études plus approfondies en chimie et pour développer des compétences qui leur permettront de devenir des décideurs éclairés comprenant le rôle de la chimie dans le monde qui les entoure. Les sujets abordés incluent la structure atomique, la cinétique chimique, l'électrochimie et l'équilibre chimique appliqués aux solutions et aux réactions acide-base.

This course continues to build upon the concepts from Chemistry 11 with a focus on application of theory and algebraic calculations for chemical reactions. Through participation in experiments students will develop skills for the safe handling of chemicals as well as observation and measurement skills.. This course is designed to prepare students for further study in chemistry and to develop abilities that enable them to be informed decision makers who understand the role of chemistry in the world around them. Topics covered include atomic structure, chemical kinetics, electrochemistry and chemical equilibrium applied to solutions and acid-base reactions.

#### Physique 11 – PHYF3S

Ce cours plaira aux élèves qui aiment faire l'application de la résolution des problèmes aux scénarios tirés de la vie quotidienne. Les sujets étudiés incluent la mesure et le mouvement linéaire. La théorie du mouvement des ondes sera présentée à travers l'étude de la lumière et du son. Le concept du champ est exploré en contextes électriques, magnétiques et gravitationnels. A ce niveau, les élèves ont besoin d'une bonne compréhension de la résolution des équations et de la trigonométrie.

This course will appeal to students who enjoy applying problem-solving to real world situations. Topics studied in-depth include measurement and linear motion. Wave theory will be introduced through the study of light and sound. The field concept is explored in electric, magnetic and gravitational contexts. At this level students will need a strong background in equation solving and trigonometry.

# FRENCH IMMERSION COURSE

#### Physique 12 – PHYF4S

Dans ce cours, les élèves terminent leur étude de la mécanique avec les sujets suivants:

La dynamique du mouvement circulaire, le mouvement projectile, la quantité du mouvement et l'énergie. Ceux-là sont suivis d'une analyse détaillée de l'électricité et du magnétisme et d'une introduction à la physique moderne, à travers les domaines de la physique médicale.

In this course, students complete their study of mechanics with the following topics: dynamics of circular motion, projectile motion, momentum and energy. This is followed by a detailed analysis of electricity and magnetism and an introduction to modern physics, through topics applicable to medical physics.

#### Histoire 12 – HICF4S

On étudiera les grands courants de la pensée contemporaine, incluant le capitalisme, le communisme, l'environnementalisme, l'impact de l'ère nucléaire et la mondialisation. L'étude sera portée sur les situations politique, économique et sociale après la Première guerre mondiale.

This course examines major trends in contemporary political, economic and social thought, with an emphasis on history after the First World War.

#### Cinéma, témoin de l'histoire modern – CMHF4S

Dans ce cours, l'élève étudie les rapports entre le cinéma en tant qu'artefact et interprète de l'histoire. Au-delà de l'examen de la dimension esthétique et émotive du cinéma, les élèves appliquent la pensée historique à l'analyse et à l'évaluation de la représentation cinématographique des thèmes principaux de l'histoire du monde contemporain. Ils font de la recherche historique et appliquent les principes de la littératie médiatique critique afin de comprendre que le cinéma ne nous fournit pas simplement un reflet direct du passé, mais qu'il interprète, raconte, et parfois reconstruit le passé.

This course considers cinema as a source of information – or misinformation – about the past, and as a springboard for critical reflection about diverse interpretations of history. Students will engage in a variety of learning strategies in this course. They will study films from various genres and periods, explore the historical and social context in which the films were created, deconstruct the techniques used to convey the filmmakers' messages, pose questions about the influence of cinema on their understanding of the past, conduct inquiry into major themes in world history, develop critical media literacy, engage in historical thinking. In order to take this class, students must have their grade eleven Canadian History (HISR3F) credit.



#### Création et production théâtrale - DAMF2S

Ce cours s'adresse aux élèves de la 10e à la 12e année en immersion française intéressés par la création et par la production théâtrale. Il permet à l'apprenant de vivre un processus de création tout en explorant les différents rôles/tâches qui mènent à une production théâtrale. Il sert de tremplin et d'orientation à ceux et celles qui participent au Festival théâtre jeunesse. Le cours est aussi ouvert aux élèves du programme Français Communication et Culture qui ont des compétences exceptionnelles en français.

This course is open to French immersion students from grades 10, 11 & 12 who are interested in theatrical creation and production. Students will experience all aspects of theatre from playwriting to production while furthering their French language skills. Their efforts culminate in the performance of their play at the Cercle Molière's Festival Théâtre Jeunesse, Western Canada's largest youth French language theatre festival in May. This course is also open to French Communication and Culture students with exceptional French skills.

#### Problèmes mondiaux 12 – GLIF4S

Les élèves devront acquérir une meilleure compréhension des enjeux mondiaux tels que la mondialisation, les relations internationales, le rôle des médias et les droits de la personne. Ils auront aussi l'occasion d'analyser les répercussions des problèmes mondiaux sur la qualité de vie en développant des opinions éclaircies et informées des actualités courantes. Ce cours est au niveau d'entrée universitaire et donne une excellente occasion de développer la pensée critique et d'acquérir un plus grand sens des problèmes mondiaux.

This course covers a variety of topics and focuses on current and past issues facing the world. Topics include political ideologies, globalization, international relationships, the role of the media, and human rights. Students will have the opportunity to pursue special interests and participate in class discussions. The course is at the university entrance level and offers an excellent opportunity to develop critical thinking skills and acquire a greater understanding of global issues.

### **GRADE 9 OPTION COURSES**

After selecting your compulsory courses, you may select from the following electives.

**REMINDER**: Students considering the International Baccalaureate (IB) Programme for Grade 10 - 12 **must take** French in Grade 9.

#### Français: Communication et Culture 9 – FRER1F

The primary purpose of French as an option course is to learn French as a means of communication. The program is designed to have students become as proficient as possible. This program gives students a solid foundation in French and an appreciation of Francophone cultures.

By talking about their lives in the classroom and by making personal connections to learning French, students are able to go out in the world and communicate in French in real and meaningful ways.

This course is a follow-up to the course given at the middle years level. It is intended to provide students with the oral and written skills they need to further their studies at a senior level.

To help cater to the needs of each student, we have divided the course into three different sections. (Note that all sections cover the same material.) Please sign up according to the description that best describes your experience:

- Beginner: 0-2 years of basic French
- Intermediate: 3+ years of basic French
- Advanced: 2+ years of French in an Immersion program (early or late)

#### Spanish 9 (0.5 credit) - SPHR1G

This course is designed as an introduction to the Spanish language. Students participate in a variety of games and activities to help enhance their comprehension of new vocabulary and verb forms. Students are also exposed to various elements of both Spanish and Latin American culture.

\*This program is designed for students who are acquiring Spanish as an additional language. Students who are fluent in the language are encouraged to write the special language exam to earn the equivalent credit.



#### Japanese Language 9 – JAPR1G

This course provides instruction in spoken as well as written Japanese (hiragona and kata-kona). Full credit may be granted upon completion of the Manitoba Heritage Language Exam. This after school class will be taken once a week and will be offered at various levels depending on proficiency, teacher availability, as well as student demand. A fee will be charged to cover the cost of staff and course materials.

#### Creative Habits (0.5 credit) - VAHP1S

This course focuses on the understanding and development of creative skills- curiosity, goal setting, noticing, experimentation, failure, perseverance, generosity, critical evaluation, reflection, etc. These creative skills are all applicable for every subject of interest! This course is open to all Grade 9 students, with or without an arts background. Students have choices with project media and design.

### **GRADE 9 OPTION COURSES**

#### Band Concert 9 – MCBR1S

This course is designed for students who already play a band instrument. The program is based on playing and performing a varied repertoire with an emphasis on playing skills and theory. It will be offered as a Grade 9 option during the regular timetable. This is a full year course offered every other day.

#### Concert Choir 9 – MCCR1S

The choir is made up of students from grades 9 to 12, this is a full year course offered every other day at 8:00 AM or lunch hour, that works towards concerts, festivals and a spring tour (every second year). We study a variety of musical styles from around the world, including classical, jazz, pop, folk and Broadway. Through the repertoire studied, we work towards musical literacy. No prior experience is required. This course aims to cultivate a lifelong appreciation for music and the skills to engage meaningfully in choral performance.

#### Visual Arts 9 (0.5 credit) – VAHB1S

This half credit Visual Art course focuses on developing students' artistic imagination through explorations in a wide variety of art mediums including, but not limited to, pencil, charcoal, watercolour, ink, and sculpture. Although skill development plays a part in this course, students need no previous experience in Visual Art to enroll. Students will experiment with tools and materials while also learning to interpret the visual world and express themselves.

#### Drama 9 (0.5 credit) - DAHB1S

Theatre provides a means to experience the world in many different ways, and to develop an understanding of the perspectives of a wide range of people, from a variety of backgrounds. Actors are encouraged to experiment with fundamental concepts such as developing a character, making strong acting choices, and developing their physical and vocal technique. Students will experiment with tableau, improvisation, stage combat, and basic scene work. The goal of this introductory course is to increase student confidence, and to develop the skill of working as part of a team.

#### Dance 9 (0.5 credit) – DNHB1S

The course focus is for students to explore the physicality and artistry behind dance in a fun relaxed environment. Various styles of dance will be explored, including jazz, ballet, contemporary, hip hop, and others. The focus will be on developing an appreciation of dance community and culture. Students will also study the influences of pop culture, and explore the choreographic process.

#### Music Inquiry (0.5 credit) - MU1H1S

This course looks at the many ways music affects us daily. We study the language of music, communication and storytelling through music, music and social justice, the effects of music on the brain and body, and the music industry.

#### Musical Theatre 9 (0.5 credit) - DMTR1S

Musical Theatre consists of two major areas of study: Performance and Production. Performance consists of vocal production, movement and acting and areas of development will include vocal technique, choreography, character development and interpretation, and stage presence. Production includes stage management, sound, lighting, sets, costumes, hair and make up and props. Learning will be centered on the preparation and performance of a musical, and open auditions will be held. You may register for this course to indicate interest but the class list will be determined by a successful audition. This is a full year course offered every other day of the school cycle at lunch.

#### Choir 9 - (0.5 credit) - MCCH1S

This course offers students of all experience levels the opportunity to develop foundational skills in choral singing and music literacy. Designed to support both beginners and experienced singers, the program focuses on building technical proficiency, musical understanding, and performance confidence in a collaborative and inclusive environment. Key areas of study include music literacy, vocal technique, exploration of diverse musical genres, ensemble performance skills, and preparation for public performances. Through a combination of guided practice, ensemble rehearsals, and performance opportunities, students will develop their abilities as musicians while gaining an appreciation for the artistry and discipline of choral singing. No prior experience is required. This course aims to cultivate a lifelong appreciation for music and the skills to engage meaningfully in choral performance.

## **GRADE 9 OPTION COURSES**

#### Digital Design/Animation 9 (0.5 credit) – CTHR1G

This course is designed to provide an introduction to the process of creating computer based digital media. Students are provided with the opportunity to develop vector drawing skills and design and create short animated cartoons featuring characters and environments that they create. Students increase their computer skills while learning animation techniques through fun hands-on projects. Students learn about computer animation and digital image manipulation using industry standard software like Adobe Animate and Photoshop. If you want to get a great introduction to the field of digital graphics while learning how to use the premier tools of the trade, this is the course that will get you started. \*This course is eligible for a Kelvin Visual Arts Certificate credit.

#### Electronics 9 (0.5 credit) - ELHR1G

Have you ever wondered about how circuit boards are made and what goes into making all of our electronics devices work? Well then this is the course for you! This course is completely project base. As a result, you will be given the opportunity to build and construct electronic circuit boards, and learn why the electronics devices we use everyday work the way that they do.

#### Graphic Design 9 (0.5 credit) - GRHR1G

Students are introduced to all areas of design. Skills are developed in many areas such as design and layout, vinyl cutting, photography, and typography. The course emphasis is on digital image creation, editing, and software applications. **\*This course is eligible for the Kelvin Visual Arts Certificate.** 



#### Robotics 9 (0.5 credit) - RBHY1G

Students will gain experience in basic mechanics and problem solving by building robots to overcome a variety of challenges. Students will be guided through several basic sample configurations and will then design their robot using whichever method they think will best handle the final project scenario. Advanced topics will include programming the robots for automated tasks and assembling wireless remote controls.

#### Woodworking 9 (0.5 credit) - WOHR1G

This course will expose students to the full range of aspects found in the woodworking lab, from drafting and design, reading plans, and the safe use of all tools and machines. The project of this course focuses on sustainability and the importance of utilizing all forms of material in the lab to build an interesting new take on a vertical slat lamp.

Attached to this course is an additional fee to cover the expense of project materials.

# **GRADE 9 OPTION COURSES**

#### Introduction to Foods 9 (0.5 credit) - FOHR1S

Students will be exposed to basic cooking techniques in the Foods lab. Emphasis will be placed on measurement, following recipes, safety and sanitation, and basic food preparation techniques. Theory will focus on Canada's Food Guide.

#### Family Studies 9 (0.5 credit) – FAHR1S

Grade 9 Family Studies explores adolescent development from the perspective of the adolescent student. Topics include building skills and knowledge in developing positive relationships to enhance personal health and wellness within the context of their own family dynamics and the community in which they live.

#### Applying Information and Communications Technology 9 – Level 1 (0.5 credit) – ICTA1F

In this course, students will develop an understanding of computer programming through gaming and app development. Students will learn about randomization, objects, control structures, events, conditional statements, loops, functions, game design, sprites, and app design. Students will produce content with the focus on user experience. The course uses a variety of block code using software such as App Lab and Game Lab on code.org. Students will also communicate ideas and analyse information using a variety of tech based media.

#### Applying Information and Communications Technology 9 – Level 2 (0.5 credit) – ICTB1F

This course will help students develop skills in creating digital content. Topics include: designing and creating graphics, creating multimedia presentations, and creating websites. Students will study the foundations of HTML and CSS. They will also apply different design principles to their various projects. Students will also communicate ideas and analyze information using a variety of technology-based media.

#### Truth and Reconciliation (0.5 credit) – TRHY1G

This course provides grade 9 students the opportunity to explore the relationship between Indigenous and Non- Indigenous peoples in Canada. The course will examine how the foundation of our nation was formed and will explore the relationship through the Truth and Reconciliation Commission (TRC) Calls to Action, in ways that bring healing and reconciliation.



#### Outdoor Education 9 (0.5 credit) – ODHY1G

Grade 9 Outdoor Education is a half credit course aimed toward highly active students who enjoy being outdoors in all weather: sun & snow. The focus of the course is on environmental stewardship and safe, sustainable outdoor activities. Students who complete this course will develop an understanding of the multitude of benefits of being active outdoors and will have the opportunity to explore and participate in a variety of outdoor activities. These may include canoeing, hiking, outdoor survival skills, wilderness first aid, emergency shelter building, cross-country skiing, snowshoeing, orienteering, knot tying, rock climbing, cycling, and leaveno-trace camping practices. The activities are subject to change on a yearly basis based on availability, weather and level of student interest. No previous experience is required, but a willingness to try new activities is necessary. Swimming proficiency is highly recommended.

Students who choose this option must be prepared to be outside every day and must come prepared for class with appropriate outerwear. In support of the course content, Outdoor Education students attend mandatory field trips. Students should be prepared for these out-ofschool activities and understand that some outof-school time will be required (departure before school hours/arrival after school hours).

#### **HUMANITIES OPTIONS**

#### The Community Service Student Initiated Project (Volunteer Credit) – CSVZ4G

Did you know that you can earn a high school credit just for doing volunteer work? That's right, you can get an extra credit on your transcript just for doing work that you love; no class time, homework, or stress required! You need to complete 110 hours of volunteer hours to earn this credit – during your time in high school. You get 4 years to complete the 110 hours – you keep track of the hours! Students can only earn one Community Service Credit. If interested please see your guidance counsellor for more information.





#### History 10 – HISR2G

This study of United States history will engage with all groups of people in the territory that now makes up the U.S. It will also include people elsewhere that are impacted by decisions and actions made in the United States. We will focus on issues of contemporary concern and attempt to account for current situations through historical exploration. This will involve dealing with foundational aspects of U.S. development related to settler colonialism; the development of racial capitalism; and the extension of U.S. interests beyond the borders of North America.

#### History 12 – HISR4S

The History 40S course covers European history from the decline of feudalism to the aftermath of World War II. It is taught chronologically but examines history through economic, social and political themes. This course is intended to prepare students for entry into university level history courses.

#### Current Topics First Nations, Métis, Inuit 12 – CTIR4S

This is a full-credit course intended for Grade 12 students, which examines Indigenous realities within contemporary and historic Canadian and global settings. The course is inclusive of the traditional values and worldviews of First Nations, Métis, and Inuit peoples. The objective of this course is to provide both Indigenous and non-Indigenous students with knowledge of Indigenous cultures and traditions, and to encourage Indigenous students to take pride in the accomplishments of their peoples.

#### **Economics 12 – ECPR4S**

This course will introduce students to the following:

- different approaches to the study of Economics
- economic history
- current issues in international economics

Throughout, economic concerns will be integrated with political, historical, and social concerns.

Democracy, justice, sustainability, and equality will be key concepts.





#### **Geography 12 – GEOR4S** Prerequisite: Geography 10

Geography 40S deals with the inter-relationships of humans and their worldwide environment. Topics covered: history of human beings on Earth, population, food and food production, resources, industrialization and urbanization. These topics will be considered from economic, sociological, political and ecological viewpoints.

### Global Issues / Citizenship and Sustainability 12 – GLIR4S

This course examines the structures and forces that guide much of human social interaction. Key topics include patriarchy, capitalism, systemic racism, and imperialism. Each of these will be explored in theory as well as through historical examples and cases that arise as we are studying. Examples and cases, as well as other topics and themes, are often chosen according to the interest of the students in the class. This course includes work of the type that will prepare students who want to study Political Science, Political Economy, Sociology, History, Anthropology, Philosophy, and other related fields.

## GRADE 10-12 OPTION CO

#### Law 12 - LAWR4S

Laws govern many aspects of our daily living. These laws deal with crime, property, work and moral issues. This course is an introduction to Canadian law, surveying the fundamentals of the legal system, covering such topics as the Charter of Rights and Freedoms, criminal law, civil law, contract law, and family law.



**Psychology 12 – PSYR4S** Open to students in Grades 11 and 12

Psychology is the scientific study of behaviour and mental processes. This course is designed to provide students with an introduction to the field of Psychology with a focus on explaining behavior using Psychological terms and concepts. Units covered include Educational Psychology, Schools of Thoughts and Modern Approaches, Biopsychology (the role the body and the brain plays in behavior), Abnormal Psychology and Social Psychology. Psychology 40S provided students who are planning to study Psychology in University with a comprehensive introduction to the discipline with emphasis on critical thinking and discussion. This course will look at issues that are of interest and relevance to high school students.

#### Theory of Knowledge 12 – THKB4S

Theory of Knowledge (ToK) is a course in critical thinking about the interconnectedness of knowledge that includes considering the validity of support for what we claim to know, awareness of strengths and weaknesses in argument, and openness to diverse perspectives. Though not a Philosophy course in the sense of studying classic works and ideas, philosophical ideas and approaches are a part of the course. Assessment is based mostly on class discussion, though students also complete one formal presentation and one paper. The course began as an IB (International Baccalaureate) course, and is now recognized by the Province of Manitoba as a half-credit option.

## GRADE 10-12 OPTION COUL

#### **TECHNOLOGY EDUCATION**

Technology Education provides students with opportunities for solving problems, designing, making and doing, and addressing current trends and issues. Students use and study technology to create practical solutions to problems – individually or in groups – to develop technical skills, knowledge and attitudes.

Technology Education enables students to explore their ideas, gain practical experiences, and work through thinking processes in a safe and supportive environment. The ability to adapt to a changing technological society and to accept social responsibility is paramount to all Manitobans in the pursuit of new careers and lifestyles. Technology Education allows learners to evaluate their strengths and interests in career choices. It also reflects rapid changes in the workplace and allows students to make informed decisions about their future.

#### **COMPUTER STUDIES**

#### Computer Science 10 – COSR2S Open to all students

This is a practical course in computer programming. Students will learn how to create software for data processing, mathematical, and recreational purposes. It is an excellent course for anyone considering a career in accounting, computer studies, economics, engineering, management, mathematics, science, or any field requiring problem solving skills. Topics to be covered include: Building a Graphical User Interface, Variables and Constants, Data Types, Strings, Control Structures, Data Structures, Procedures, and Graphics. The programming language to be used will be Visual Basic in the Visual Studio IDE.



#### **Computer Science 11 – COSR3S** Prerequisite: COSR2S

This is an intermediate-level course in computer programming and software development. Topics include: Systems Design, Computer Organization, Networks, Concurrency, Abstract Data Structures, Algorithms Analysis, Object-Oriented Programming, Control Structures, Resource Management, and Databases. The programming language which will be used is Java in the NetBeans IDE. Students will also be preparing for a large-scale software solution project.

#### **Computer Science (IB) 11 – CSSB3S** Prerequisite: registered in the IB Programme

This is the first of two computer science courses following the IB curriculum. Topics include: Systems Design, Computer Organization, Networks, Concurrency, Abstract Data Structures, Algorithms Analysis, Object-Oriented Programming, Control Structures, Resource Management, and Databases. The programming language which will be used is Java in the NetBeans IDE. Students will also be preparing for a cross-subject collaborative group project as a part of the IB Diploma.

#### Computer Science 12 – COSR4S

Prerequisite: Computer Science 30S

This is a continuation of advanced computer programming and software development; it is recommended for students considering postsecondary education and/or careers in computer science. Topics include: Abstract Data Structures (Linked Lists, Stacks, and Queues), Binary Trees, Recursive Algorithms, Systems Design, Computer Organization, Networks, Concurrency, Abstract Data Structures, Recursion, Object-Oriented Programming, Control Structures, Resource Management, Databases, and Random Access Files. The programming language which will be used is Java in the NetBeans IDE. Students will also be completing a large-scale software application.

#### Computer Science (IB) 12 – CSSB4S

Prerequisite: Computer Science (IB) 32S

This is the second of two computer science courses following the IB curriculum. Topics include: Abstract Data Structures (Linked Lists, Stacks and Queues), Binary Trees, Recursive Algorithms, Systems Design, Computer Organization, Networks, Concurrency, Abstract Data Structures, Recursion, Object-Oriented Programming, Control Structures, Resource Management, Databases, and Random Access Files. The programming language which will be used is Java in the NetBeans IDE. Students will also be completing a large-scale software application and participate in the G4 crosssubject collaborative group project.

### Web Design & Interactive Websites 35S - WDHR3S

This full credit course provides students with the skills and knowledge to design, develop and publish simple to advanced websites. Students will build and design websites using design principles, and will learn how to use image editing and animation software to help develop content for their websites. Students will also learn the essential web-based coding skills of HTML, CSS, and JavaScript programming languages.



#### Entrepreneurship - ENTR2S Open to students in Grade 10, 11 and 12

Entrepreneurship focuses on developing the foundational skills and ideas needed to plan and develop a business. This course is relevant to high school students since many are already involved in their communities, and are starting to recognize various needs and opportunities in their areas. Students begin by evaluating innovation, inventions, and innovative ideas. They learn the process of planning, marketing, and implementing a venture. This course is designed for students interested in business principles related to the ownership and management of a business. The final project consist of the student running their own businesses.

#### LIFEWORKS

#### Career Development Grade 11 & 12 - LWBR3S & LWTR4S

Open to all Grade 11 and 12 students

Career Development courses are designed to connect school learning with workplace and labour market realities. These courses assist students in making a transition from school to post-secondary and/or the workplace by providing opportunities and experience to help better prepare them. These courses are part of the provincial government's framework of learning outcomes for Career Development. Students will begin in the classroom where they will learn skills that will lead to a community work experience, which is mandatory for all students. These courses will be offered together in the afternoon, slots D & E (students must take both courses together).

#### HUMAN ECOLOGY

#### FAMILY STUDIES, GRADES 10 to 12

Family Studies explores the importance of the family to individual members and society as a whole. Each course has some common concepts; communication, conflict resolution, functions of the family, self-esteem, values and decision making. There is no prerequisite for any of the Family Studies courses.

#### Family Studies 10 – FSTR2S

Grade 10 Family Studies focuses on the skills and knowledge parents and caregivers need, with emphasis on maternal health, pregnancy, birth, and the early years of human development. Students will learn about the developmental needs, effective care, and guidance of young children. The development of these skills and knowledge will enhance their overall well-being now as adolescents and in the future as parents and caregivers.

#### Family Studies 11 – FSTR3S

Grade 11 Family Studies focuses on children's and adolescents' relationships within their families. Students will learn about developmental needs, effective care, and positive interactions with children/ adolescents. The skills and knowledge that students gain will provide them the opportunity to make informed decisions related to parenting, relationships, and families.

#### Family Studies 12 – FSTR4S

Grade 12 Family Studies emphasizes the transition from adolescence to adulthood with the ability to examine and practice skills that help develop healthy interpersonal relationships. The skills and knowledge will provide the opportunity for students to make informed and responsible life management choices now and in the future.



#### Food as a Part of Healthy Living 10 – FNUR2S

Students will explore how food plays a part of a healthy lifestyle. Nutrients, healthy eating, the Canada Food Guide will be discussed with an emphasis on health issues and healthy weights. Basic as well as more advanced cooking techniques will be practiced.

#### Foods Around the World 11 – FNUR3S

In addition to health issues, global food issues will make up a major part of this course. Cooking techniques and food dishes from around the world will be introduced.

#### Foods & Nutrition 12 – FNUR4S

Students will approach food as a consumer. The emphasis will be planning meals that are both healthy, and fit the resources available, both time and money. Students will be exposed to career opportunities as well.

#### **INDUSTRIAL ARTS**

#### Digital Media Production 10/11 – VA1R2S/VA1R3S

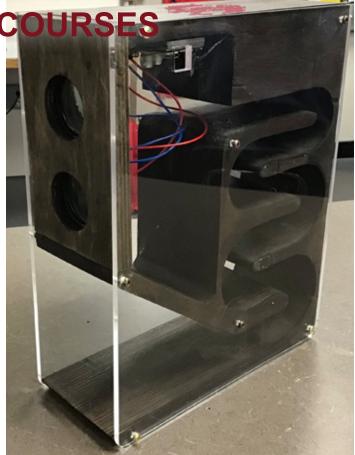
Open to all Grade 10-12 students. Students should have basic computer skills and be independent learners as this course is selfdirected. Students who have an interest in digital media creation and/or the technology behind how it all comes together should enroll for this credit. Digital Media Production offers real-life, project based video assignments. Students will learn the fundamentals of video production, basic shooting techniques, editing workflow and work with industry standard editing software. This course operates outside of regular school hours and students will need to be available to capture media of school events. The course will be not timetabled in the regular school day. Students must complete 110 hours to receive credit.

#### **Electronics 10 – ELER2G**

The grade 10 program is a continuation of the grade 9 program, designed to build upon previously taught skills and further fill your curiosity. In this course students will be introduced to the world of house wiring, advanced circuit board building, Arduino microcontrollers and the use of computer numerically controlled machinery.

#### **Electronics 11 – ELER3G**

This course is designed to further students curiosity in Electronics. Students will be introduced to the world of advanced circuit board construction through the use of computer numerically controlled machinery. We will also further investigate computer programming through the use of Arduino microcontrollers. Pre-engineering concepts will be explored and implemented in the program.



#### Electronics/Applied Technology 12 – ELER4S

Have you ever wanted to build a hovercraft? Well this is the course for you! This course is designed to explore Pre-Engineering concepts while furthering students' interest in house wiring, study alternative energy resources, and design and construct a RC hover craft. Through the study of alternative energy resources students will compete in a wind turbine competition to see who can produce the most electricity! Following this, students will compete to see who can design and construct the fastest RC hover craft!

#### Graphic Design 10 – GRAR2G

This course is a continuation of the Grade 9 Graphic Design course. However, the grade 9 level is not a prerequisite. Skills are developed and refined in areas that include advertising art, vector illustration, logo creation, screen printing, vinyl cutting, print layout, and publication. Students planning a career in architecture, interior design, engineering, graphic arts, and fine arts are encouraged to enroll in this course. **\*This course is eligible for the Kelvin Visual Arts Certificate.** 

#### Graphics – Digital Design & Animation – Level 2 – GRAR3G

Open to all Grade 10-12 students.

This course is ideal for students who wish to explore the world of digital graphic design and animation. It draws from the grade 9 level Digital Design & Animation course however is offered as an introductory course. Through simple design projects and critiques, students learn foundations in vector drawing, frame by frame and "tweened" animation, character design and animation, image editing and 3D modeling. Students will have an introduction to industry standard software such as Adobe Animate, Photoshop and Cinema 4D. Digital Design Level 2 is a hands-on, fun way to learn about digital media production. Look for this course in Grade 11 options. \*This course is eligible for the Kelvin Visual Arts Certificate.

#### Graphics – Digital Design & Animation – Level 3 – GRAR4S

Recommended Prerequisite: Digital Design & Animation – Level 2

Put your creativity and imagination to work. Continuing on the core of Digital Design Level 2, this course provides students with an opportunity to expand on the techniques and principles of animation. Students will further their experiences in motion graphics and image manipulation with a strong focus on 3D modeling and animation. The art and science of 3D printing will be explored where students will be able to design and 3D print their own creations. Digital Design Level 3 is a must for anyone interested in a career in digital media. **\*This course is eligible for the Kelvin Visual Arts Certificate.** 



#### Design Design Drafting 11 – DRAR3G

Drafting Design 30G offers students a handson introduction to the fundamentals of design, fabrication, and engineering problem-solving. The course begins with an overview of STEM disciplines and design thinking principles. Students will work with digital design tools to build essential skills in vector graphics and 3D computer-aided design creating prototypes using a variety of manufacturing technologies. After exploring basic concepts in electronics and programming students will develop interactive design projects. This course is the foundation for the skills required for Drafting Design 40S.

#### Design Drafting 12 (NEW) – DRAR4S

Building on foundational skills from Drafting 11, Design Drafting 40S delves into engineering applications such as mechanical, electrical, structural, aerospace, and environmental engineering. This course emphasises problemsolving through engineering challenge projects. Students will collaborate on innovative solutions while also developing individual or group capstone projects, promoting self-directed learning and critical thinking. This dynamic curriculum is designed to inspire the next generation of STEM leaders, equipping them with the advanced knowledge and skills to address real-world challenges.

#### Woodworking 10 – WOOR2G

This class will introduce students to all the steps involved in building a beautiful nightstand out of wood. It will include calculating material costs and cover everything from milling lumber and cutting tapered legs – to joining nightstand pieces together with simple, strong joinery. Students even learn how to create their own beautiful tabletops, add a shelf, and even tackle a professional oil finish with ease. Emphasis will be on learning a systematic approach to building that flows smoothly, following a logical path that enhances accuracy and speed. Attached to this course is an additional fee to cover the expense of project materials.



#### Woodworking 11 – WOOR3G

Explore the finer points of woodworking while building an elegant project. Don't be fooled by this class, this course packs a big punch when it comes to furniture construction. Learn new and challenging joints that will be used to build a floating nightstand with a drawer. The focus of this class will be on learning a blended approach to woodworking, utilizing machines, power tools, and hand tools to create a product of the highest quality, in the most efficient manner.

### Attached to this course is an additional fee to cover the expense of project materials.

#### Woodworking/Applied Technology 12 – WOOR4S

Explore the finer points of woodworking while designing a building an elegant project. This course will push student learning in the lab and encourage an exploratory aspect of woodworking. More focus will be placed on machine maintenance, use of and construction of jigs/templates, project research, and time management. Students will use all of this



knowledge to create a project of their own choosing, including developing technical drawings, procedure plans, and anything else needed to create a project of their own choosing.

Attached to this course is an additional fee to cover the expense of project materials.

### Yearbook – Journalism and Production – DPHR2S

Open to all Grade 10-12 students

This course is designed for students who have a keen interest in graphic design, digital art, photography and journalism. Students must be independent workers as well as team players, energetic, organized and possess good communication skills. Students will develop abilities in gathering information, writing copy and captions, understanding components of quality photography and copy editing skills. Emphasis is placed on developing skills in layout and design, and graphics. Students must be available outside of school hours to capture media of Kelvin events. Students looking for an advanced yearbook credit and to be eligible for a yearbook scholarship may obtain additional credits in yearbook by special arrangement with the instructor. These students looking for a second credit in yearbook will take on the responsibilities of a student editor.

#### LANGUAGES

It is very important that language learning is connected to the culture of the language being learned. To achieve this goal, students will be given the opportunity to participate in authentic field trips like Festival du Voyageur.

#### FRENCH: COMMUNICATION AND CULTURE

#### GRADES 10 - 12

(formerly known as Basic French)

The goals of the course French: Communication and Culture are to give students the opportunity to acquire the necessary language skills to communicate in French, to value the learning of French as a tool for personal, intellectual, and social growth, to demonstrate an appreciation of francophone cultures and to further develop intercultural communication skills that are essential to all global citizens. We use a balanced literacy approach focusing on:

- oral communication
- reading
- writing
- culture

Themes explored:

- adolescence and adulthood
- leisure activities
- arts and culture
- social trends

#### French 10 – FRER2F

Prerequisite: French 9: FRER1F or equivalent

Using an interactive, communicative approach, students will further develop their French language skills and be able to express more complex ideas.



#### French 11 – FRER3S Prerequisite: French 10: FRER2F or equivalent

Using the same approach as in 20F, students in this course will also be expected to become more independent language learners seeking information, expressing themselves, and selfediting for content and grammar.

#### French 12 – FRER4S

Prerequisite: French 11: FRER3S

This course uses the same approach as the prerequisite courses. Students will be expected to be independent language learners, using a variety of references to find the information they need to complete their work. As well, they will be exposed to literary excerpts and public speaking.

#### **SPANISH GRADES 10-12**

The primary purpose of the Spanish program is the acquisition of Spanish as an additional language. Students will know and use various strategies to maximize the effectiveness of learning and communication in this language. Beginning at a Grade 9 level, students develop their proficiency in Spanish and build on their communication skills both orally and in writing.

\*This program is designed for students who are acquiring Spanish as an additional language. Students who are fluent in the language are encouraged to write the special language exam to earn the equivalent credit.

#### Spanish 10 – SPAR2G

The Grade 10 Spanish course serves as a beginning as well as continuing course from Grade 9 Spanish. As early as possible in the semester, classes will be conducted in an immersion setting, allowing students to develop both comprehension and communication skills in one of the most widely-spoken languages in the world. Students are encouraged to speak in Spanish as much as possible through class discussions, group work, games and presentations.

#### Spanish 11/12 - SPAR3S/4S

Prerequisite: Spanish 10 or equivalent

This combined class is conducted almost entirely in Spanish. This immersion setting allows students to further their skills in Spanish as an additional language. Students will continue to build on their proficiency through various activities and study of text, plays, class discussions, group work and presentations. Previous experience with the language is strongly recommended.



#### JAPANESE Japanese Language – JAPR1G

This after school class will be taken once a week and will be offered at various levels depending on proficiency, enrollment numbers and teacher availability. (There will be a fee.) As languages reflect cultures, we believe the study of Japanese is extremely important in raising awareness about Japan.

#### SPECIAL CREDIT FOR LANGUAGES

Students may earn special credit for languages not included in the regular high school program. One credit may be granted at each level. Testing occurs two times a year in the division. Announcements are made through our Guidance Department for special language exam applications and test dates. A maximum of four special language credits may be counted towards graduation.

#### VISUAL AND PERFORMING ARTS

#### Visual Arts 10 – VIAR2S

At all grade levels, the Visual Arts program focuses on developing technical skills in order to explore and communicate ideas while also enhancing abilities in creative problem-solving, art appreciation, and visual literacy. The grade 10 course explores a variety of art media in drawing, painting, sculpture, mixed media, and printmaking, with a focus on building foundational technical skills that will support future experimentation in higher level art courses. Students will develop skills in brainstorming and idea development to strengthen their personal creative process and artistic expression. Students will have the opportunity to share their work through digital and/or physical means. No prerequisites are required. There is a fee associated with this course.

#### Visual Arts 11/12 - VIAR3S/4S

At all grade levels, the Visual Arts program focuses on developing technical skills in order to explore and communicate ideas while also enhancing art appreciation and visual literacy. This course aims to explore a variety of art media in drawing, painting, sculpting, mixed media, photography and print making. Students will develop risk taking and problem-solving skills while increasing confidence in their own creative process and artistic expression. Students will have the opportunity to share their work through digital and/or physical means.

No prerequisites are required at any level. Art skills are not necessary: this course is for anyone willing to release their creativity! \*Students may only be enrolled in one Visual Art course per academic school year.

#### Photography: VAPR3S

This course offers students the unique opportunity to discover the art of visual communication through photography. Students will learn and develop technical competence with a digital camera, refine composition and imaging skills, as well as explore both artistic and journalistic photography. Students will be introduced to photography programs such as Lightroom and Photoshop. The history of photography and its place in contemporary media will also be studied. Students are encouraged to have access to a digital camera, but there will be limited school cameras available.

#### Drama 10 - Acting – DAMR2S

Theatre provides a means to experience the world in many different ways, and to develop an understanding of the perspectives of a wide range of people, from a variety of backgrounds. Actors are encouraged to examine the unique individuals and circumstances presented in a wide range of plays, and to experiment with creating characters and playing a variety of different roles. Students will work with tableau, pantomime, radio plays, commercial voice overs, slam poetry, improvisations and scene work. The performance of scripted works will comprise a significant portion of this course.

#### Drama 11 – DAMR3S

The 30S drama course is specifically designed to expose students to a greater range of theatre styles to continue to introduce students to a diverse range of playwrights. Building on the skills learned in DMAR2S, the performance of scripted works will continue to comprise a significant portion of the course. Practice auditions will also be scheduled to help prepare students for auditions and job interviews.

#### Drama 12 – DAMR4S

Grade 12 students will be expected to take on a leadership role in class, developing and leading class warm-ups, and contributing to the decisions that affect the goals of the course. Students will perform increasingly longer scenes with more complex characters, and the year usually culminates in the performance of a full length play. There is no prerequisite for this course, but some experience (Drama 10/11 or other experience) is recommended.

#### Wellness and the Arts – WEAY2G/WEAY3G/ WEAY4G

This course explores how the arts, including creative writing, dance, drama, music, visual arts, and environmental education, can be applied to nurture well-being, in self- reflective, relational, and community contexts. Students will be encouraged to exercise their creativity, build community, and cultivate resilience through arts-based wellness experiences while learning foundational mental health theory and approaches. Students will discover the effects when arts enter places such as hospitals, schools, prisons, parks, and aged care centres. Overall, students will have an experiential understanding of the importance of arts for community health, care, and joy.

#### Dance 10-12 - DANR2S/3S/4S

This course offers an opportunity to explore dance in a safe and fun environment while learning about various styles of dance, such as hip-hop, lyrical, jazz, contemporary and wellness. The focus is on developing an appreciation for different styles of dance genres and cultures while also exploring the choreographic process.

Students will simultaneously develop a strong technical foundation with artistic expression and performance, develop discipline, dance literacy and the necessary skills required for functioning in a dance class.

#### KELVIN COMPETITIVE DANCE TEAM (KDC) Dance 1 Special Interest - DN1R1S/2S/3S/4S (Days 2, 4 & 6)

KDC is a performance based Hip-Hop group of dancers, who strive for higher level training and dance exposure. Dancers meet 3 times a cycle over the lunch hour. KDC is provided with numerous opportunities to perform in a wide variety of competitive and noncompetitive venues. Open auditions will be held at the beginning of the school year. Students will be selected to participate in this course. In addition to rehearsals and performances, this course also consists of independent study units and assignments. There is a fee associated with this course.

#### POM

#### Dance 2 Special Interest - DN2R1S/2S/3S/4 (Days 1, 3 & 5)

POM is a jazz based, energetic and dynamic style of dance that places emphasis on precise and synchronized arm movements, formations, jumps and skills. It is characterized by the use of POMs which dancers hold in their hands through a routine. POM is provided with numerous opportunities to perform in a wide variety of competitive and non-competitive venues. Dancers meet three times a cycle over the lunch hour. Open auditions will be held at the beginning of the school year. Students will be selected to participate in this course. In addition to rehearsals and performances, this course also consists of independent study units and assignments. There is a fee associated with this course.

#### Concert Choir 10/11/12 - MCCR2S/3S/4S

The choir is made up of students from grades 9 to 12, this is a full year course offered every other day at 8:00 AM or lunch hour, that works towards concerts, festivals and a spring tour (every second year). We study a variety of musical styles from around the world, including classical, jazz, pop, folk and Broadway. Through the repertoire studied, we work towards musical literacy.



#### Chamber Ensemble (Choir) 10/11/12 – MCER2S/3S/4S

This course offers the student an opportunity to sing more challenging choral literature, much of it unaccompanied. As much of the music will be relatively difficult, students will be required to demonstrate musical competence through an audition. This is a full year course offered every other day at 8:00 AM. The choir will perform on a number of occasions through the year. Members of the choir must also be registered in Concert Choir 10/11/12.

#### Concert Band 10/11/12 - MCBR2S3S/4S

This course is designed for students who already play an instrument at a high level and wish to participate in the wind ensemble. The program is based on playing and performing a varied repertoire with an emphasis on instrumental skills. This course carries one full credit, and will be scheduled before school and during noon hours to avoid conflict with other courses.

#### Musical Theatre 10/11/12 - DMTR2S/3S/4S

Musical Theatre consists of two major areas of study: Performance and Production. Performance consists of vocal production, movement and acting and areas of development will include vocal technique, choreography, character development and interpretation, and stage presence. Production includes stage management, sound, lighting, sets, costumes, hair and make up and props. Learning will be centered on the preparation and performance of a musical, and open auditions will be held. You may register for this course to indicate interest but the class list will be determined by a successful audition. This is a full year course offered every other day of the school cycle at lunch.

## PERFORMING ARTS CERTIFICATE PROGRAM

The skills gained in a performing arts program are all highly valued employability skills; it teaches one to communicate beyond the spoken word. The ability to display confidence, poise, creativity, and self-discipline will allow these young adults of the 21st century a greater chance to compete with a diversity of skills that are much needed in today's work environment.

Due to the importance of a performing arts background for our future student leaders, Kelvin offers a Performing Arts Certificate which began in 2009.



Course	Course Code
Grade 9	
Band Concert 9	MCBR1S
Concert Choir 9	MCCR1S
Choir 9	MCCH1S
Dramatic Art 9	DAHB1S
Dance 9	DNHB1S
Jazz Band 9	MJBR1S
Kelvin Dance Collective (KDC)	DN1R1S
Music Inquiry	MU1H1S
Musical Theatre	DMTR1S
POM 9	DN2R1S
Grade 10/11/12	•
Chamber Choir 10/11/12	MCER2S/MCER3S/MCER4S
Concert Band 10/11/12	MCBR2S/MCBR3S/MCBR4S
Concert Choir 10/11/12	MCCR2S/MCCR3S/MCCR4S
Dance 10/11/12	DANR2S/DANR3S/DANR4S
Drama 10/11/12	DAMR2S/DAMR3S/DAMR4S
IB Art 11/12	VIAB3S/4S
Jazz Band 10/11/12	MJBR2S/3S/4S
Kelvin Dance Collective (KDC)	DN1R2S/3S/4S
Musical Theatre	DMTR2S/3S/4S
POM 10/11/12	DN2R2S/DN2R3S/DN2R4S





### Performing Arts Certificate Program Requirements

A minimum of 10 performing arts credits with an average of 80% or greater is required to earn the Performing Arts Certificate.

Private options, such as private music lessons, are not eligible for this certificate.

## VISUAL ARTS CERTIFICATE PROGRAM

#### "Tomorrow is our permanent address"

- Marshall McLuhan, media pioneer, and École secondaire Kelvin High School Alumnus

Kelvin's Visual Arts Certificate Program provides the motivated and creative student a full spectrum of experiences in the visual disciplines. Following in the true spirit of Marshall McLuhan, and his catchphrase: "The Medium is the Message", our program balances opportunities to study traditional art education along with graphic design, architecture, digital design, animation, video, and digital photography. Dedicated staff have collaborated to create an innovative and well-rounded program that encourages resourceful and creative problem solving skills, as well as the foundation for further education in the visual arts.

The creative mind is one that is highly sought after by all factions of industry, business and education. The Kelvin Visual Arts Certificate Program offers students a supportive setting where imagination and vision can flourish.

#### REQUIREMENTS

In order to obtain the Kelvin Visual Arts Certificate, students must have **completed the required number of courses in the two complementary visual art areas** (see right) while maintaining a minimum of **80%** in those courses. Successful qualification also requires that students acquire a minimum of **two credits at the grade 10, 11 and 12 levels**.



Visual Arts (3 Courses)
Visual Arts 9 (VAHB1S)
Visual Arts 10 (VIAR2S)
Visual Arts 11 (VIAR3S)
Visual Arts 12 (VIAR4S)
Visual Arts IB 11 (VIAB3S)
Visual Arts IB 12 (VIAB4S)
Photography 11 (VAPR3S)
Industrial Arts (3 Courses)
Graphic Design 9 (GRHR1G)
Graphic Design 10 (GRAR2G)
Digital Design 1 (CTHR1G)
Digital Design 2 (GRAR3G)
Digital Design 3 (GRAR4S)

The following courses may be substituted for one of the above courses if necessary: Digital Media Production (VA1R2S/3S) Yearbook (DPHR2S/3S) Design Drafting 11 (DRAR3G) Design Drafting 12 (DRAR4S)

The IB programme is a comprehensive and rigorous program of studies that prepares students for examinations administered worldwide. The standing which students obtain on these examinations and on their IB supervised internal assessed coursework determine their IB grades, which are recognized by universities throughout the world. IB graduates are well prepared for post-secondary education. Many universities grant first year standing for courses in which students have achieved a certain level on their IB courses.

IB offers all of its examinations at two levels -Higher and Standard. The Diploma requires that students study six subjects, representing at least five subject areas, and write six examinations, three at the Higher Level and three at the Standard Level or four at the Higher Level and two at the Standard Level. In addition to which, Diploma candidates must complete a major



research project called the Extended Essay, they must participate in extra-curricular and social service activities (CAS) and they must complete a course called Theory of Knowledge (TOK).

The table below shows the International Baccalaureate Organization (IBO) course groupings with the specific subjects that Kelvin offers as of the current school year.

Group	Subject	Course and Level	
One	Studies in language and literature	English HL	
Two	Language acquisition	French HL or SL	
Three	Individuals and societies	Economics HL; History HL; Global Politics HL	
Four	Sciences	Biology HL; Chemistry SL; Physics HL; Computer Science HL or SL	
Five	Mathematics	Mathematics SL	
Six	The arts	Music HL or SL; Visual Arts HL or SL	

GRADE 10 YEAR	GRADE 11 YEAR	GRADE 12 YEAR
ENGB2F – ENGLISH 20F	ENGB3S – ENGLISH 32S	ENGB4S – ENGLISH 42S
FRSB2F – FRENCH 20G FREB2F – FRANÇAIS 20F	FRSB3S – FRENCH 32S FRHB3S – FRANÇAIS 32S	FRSB4S – FRENCH 42S FRHB4S – FRANÇAIS 42S
GEOB2F - GEOGRAPHY 20F	GLOBAL POL 32S	GLOBAL POL 42S
HISB3F - HISTORY 30S	HISB4S - HISTORY IB 40S	HIHB4S - HISTORY 42S
SCIB2F – SCIENCE 20F	BIHB3S – BIOLOGY 40S	BIHB4S – BIOLOGY 42S
PHYB3S – PHYSICS 32S	PHYE4S – PHYSICS 40S	PHYB4S – PHYSICS 42S
CHEB3S – CHEMISTRY 32S	CHEB4S – CHEMISTRY 42S (STUDENTS WRITE IB SL EXAM)	
IAPB2S – INTRO TO APPLIED AND PRE-CAL MATH 20S 1ST SEMESTER	PCMB4S – PRE-CALCULUS 40S	MASB4S – MATHEMATICS 42S
PCMB3S – PRE-CAL MATH 30S 2ND SEMESTER	THKB3S – THEORY OF KNOWLEDGE 32S	THKB4S – THEORY OF KNOWLEDGE 42S
PHEB2F – PHYS. ED. 20F	PHEB3F – PHYS. ED. 30F	PHEB4F – PHYS. ED. 40F
OPTIONS: CSSB3S - COMPUTER SCIENCE 32S MUSB3S - MUSIC 32S VIAB3S - VISUAL ARTS 32S (with sufficient registration) or other courses as they fit into the I.B. timetable		OPTIONS: CSSB4S- COMPUTER SCIENCE 42S MUSB4S – MUSIC 42S VIAB4S – VISUAL ARTS 42S (with sufficient registration) or other courses as they fit into the I.B. timetable

While IB is designed to be a two-year curriculum for the final two years of high school, most schools find it necessary to have preliminary studies in order to enrich and accelerate the studies of prospective IB students. A preparatory IB year aims to raise students' entry level skills and knowledge.



École secondaire Kelvin High School offers an IB preparatory year for Grade 10 students. Grade 10 students follow a curriculum that prepares them for future IB Diploma studies. In this preparatory year, students will study two languages - English and French, two Social Science courses – Geography and History, three Science courses – Biology, Chemistry and Physics, two mathematics courses – Grade 10 Introduction to Applied and Pre-Calculus and Grade 11 Pre-Calculus, and Physical Education.

IBO allows students to attempt an examination at the Standard Level in May of their Grade 11 year. This is called Anticipated status. Kelvin students are registered as Anticipated Candidates in IB Chemistry. They write the IB SL Chemistry exam in May of their Grade 11 year.



For all subjects, students are awarded percentage grades and course credits by Kelvin High School according to the standards determined by Education Manitoba. In addition, students writing IB exams are awarded International Baccalaureate grades in July of their Grade 12 year after the IB examinations are assessed throughout the world.

#### GROUP 1 - STUDIES IN LANGUAGE AND LITERATURE - ENGLISH

#### English IB 10 - ENGB2F

Kelvin's English 10 IB course is designed for students who are interested in English literature and language, and who are willing to do a significant amount of challenging reading and writing. By taking this course, students earn the compulsory grade 10 English credit required by the province of Manitoba, and they are introduced to material and activities that will prepare them for the International Baccalaureate (IB) English Programme offered at Kelvin High School in Grades 11 and 12.

#### English IB 11/12 – ENGB3S/4S Prerequisite: English IB 10

IB English is a two-year course covering a variety of themes, styles and forms of literature in greater depth than in the regular program. Poems, essays, plays and novels are studied in the context of selected topics. Literature in translation is a special feature. Students' oral and written work is assessed, both internally and externally, over two years. Students write IB English: Literature HL (Higher Level) Paper 1 and Paper 2 exams in May of their Grade 12 year and complete the HL Essay and the Individual Oral during the course.



### GROUP 2 - LANGUAGE ACQUISITION - FRENCH

The French courses in the International Baccalaureate Programme offer two levels of study: Standard and Higher Level. Starting in Grade 10, students are placed in one of these levels according to their previous experience. The Standard level courses are intended for students who have studied French in the regular program. Higher level French is geared to students who have immersion experience, or exceptional experience in the language.

The objectives of the Language B course, at both Higher and Standard levels, are language acquisition and intercultural awareness. The course curriculum areas of study are: Identities, Experiences, Human Ingenuity, Social Organization, and Sharing the Planet. At the Higher level only, students will study Francophone literature.

Students must be prepared, in their grade 12 year at both Standard and Higher levels, to do an oral assessment at the end of the first semester. They will also take the oral comprehension, written comprehension and composition exams in May.

### GROUP 2 - LANGUAGE ACQUISITION - FRENCH

In all IB French courses, students will discuss, read, and write about aspects of Francophone economic, social, and cultural life.

#### STANDARD LEVEL

#### French SL IB 10 – FRSB2F

This course is designed to develop vocabulary and improve pronunciation and communication skills. It also aims to provide students with a thorough understanding in French structures, with a view to preparing them for the oral and written assessment demands of Grades 11 and 12.

#### French SL IB 11/12 – FRSB3S/FRSB4S

This course, using the communicative approach, covers fully all that is required for the Manitoba 12 French Communication and Culture credit.

In addition, students are expected to make a conscious effort to broaden their vocabulary (see theme content on previous page) and to be attentive to French idiom, preparing themselves for the oral and written IB exams. As well, students are expected to be able to read and write different types of texts and to listen to authentic audio recordings and to answer specific questions.

#### **HIGHER LEVEL**

#### French HL IB 10 – FREB2F

This course is designed to reinforce grammatical structures and communication skills, and to promote the development of accurate idiomatic expression. Students are also introduced to literary analysis by studying a variety of literary texts, novels, and films.





#### French HL IB 11/12 – FRHB3S/FRHB4S

The Language B French curriculum adopts a communicative approach, based on thematic units while maintaining an emphasis on literary works (see theme content on previous page). A wide variety of texts will be selected with a view to developing all four language skills, listening, reading, speaking and writing. Accurate use of the language is expected. Students prepare for their oral exam by making presentations in class and by listening to and discussing a wide variety of audio samples.

#### **GROUP 3 - INDIVIDUALS AND SOCIETIES**

#### Geography IB 10 – GEOB2F

The course is a study of North America, with a focus on Canada and its role in the global community. The course will study geographic literacy, natural resources, food from the land, industry and trade, and urban places. Students will be engaged in various topics connecting the physical geography with the human geography. Students will also be required to research various topics throughout the course and present their findings to the class.

#### History IB 10 - HISB3F

The Grade 10 IB History course fulfills the Manitoba requirement that all students study Canadian History. Students will be expected to complete more reading, research and writing than in the regular program. The course is thematically organized. It surveys First Nations' history, French-English relations, Canadian-American relations, economic and social history, immigration, and foreign affairs.

#### History IB - Europe -11 - HISB4S

The Grade 11 IB History course will begin with an analysis of the French Revolution and its consequences - Napoleon and the Concert of Europe. Nationalism as a dominant force in this century will be looked at in terms of Italian and German unification. As well, the major intellectual developments of the second half of the 19th century will be studied, including liberalism and socialism. The course will conclude with a look at the social, political and diplomatic origins of WWI. This course must be chosen by those wishing to do Higher Level History as part of their IB studies.



#### History IB - 20th Century - 12 - HIHB4S

The Grade 12 IB History course, offered at Kelvin High School, studies historical change in the 20th century, focusing on certain themes: colonialism, war, revolutionary change and decolonization. The course is Euro-centered but it also looks at 20th century history in a global context. Thus, the Americas (Argentina, Mexico, Cuba), Asia (China) and selected European countries are studied according to the themes listed above. The course is set up according to IB requirements governing both the Higher and Standard levels of study. For both levels, great emphasis is placed on writing skills, the reading of documents and the historiography of the subject. Each student is required to write a research report on a selected topic for submission to IB examiners.

#### **Global Politics IB 11/12**

The study of politics focuses on power. This includes familiar forms, such as elections, governments, and laws, but it also includes the many other ways in which power manifests itself through social and economic relations. This two-year HL course focuses on three major themes: rights and justice; development and sustainability; and peace and conflict. The Internal Assessment is an engagement project, for which students will be expected to analyze power and agency at a local or community level. The grade 12 portion of the course will involve a significant extension of the course material, for which students will be expected to identify areas of personal interest that connect to global political challenges related to at least two of the following: borders, environment, equality, health, identity, poverty, security, and technology. The case studies used in examining these challenges will also be chosen by individual students.

#### **GROUP 4 - SCIENCES**

Grade 10 IB students take three credits in Science. At the end of the year, they will have a credit in Grade 10 Science, Grade 11 Chemistry and Grade 11 Physics. This science program is designed to give students a strong background in science and is suitable preparation for the IB examinations and university study.

#### Science IB 10 – SCIB2F

Science IB 20F introduces students to the study of science in the IB programme. This course begins with the application of statistics to problems in science. Topics studied include cellular structure, human physiology, ecology and a brief introduction to physics concepts. This course provides students with a deeper understanding of the human body and how humans fit into the natural world.

#### Biology IB 11 – BIHB3S

This course is designed for the IB student considering future enrolment in the IB Biology HL course. This fast paced course introduces students to the fundamentals in the study of biology. Topics covered include cellular biology, human physiology, ecology and genetics. Statistical analysis of scientific data is introduced to enable students to complete future research.

#### Biology IB 12 – BIHB4S

The IB Biology course provides a solid foundation in the concepts of biology, as students learn about themselves and the natural world around them. The course includes human anatomy and physiology, cellular biology, ecology, evolution and genetics. This is an enriched biology course, which includes in depth studies in topics such as neurobiology, biochemistry, biotechnology and conservation. Emphasis will be placed on practical work and research in accordance with the IB curriculum. This course prepares students to write the IB Biology HL exam.



#### Chemistry IB 11/12 - CHEB3S/4S

The IB Chemistry course provides a solid foundation in the chemical concepts of atomic theory, stoichiometry, periodicity, bonding, states of matter, energetics, kinetics, equilibrium, acids and bases, redox, and organic chemistry. This is an enriched Chemistry course which includes options such as medicinal chemistry, spectroscopy, and environmental chemistry. A strong emphasis is placed on practical work and the development of laboratory skills. During the second year, students will have the opportunity to design and implement their own experiment. This course prepares students to write the Chemistry Standard Level IB exam in May of their Grade 11 year.

#### **GROUP 4 - SCIENCES**

#### Physics IB 10 – PHYB3S

Taken in the Grade 10 year, PHYB3S is an introduction to the study of Physics. Topics studied in-depth include measurement, linear motion, forces, friction, and vector analysis. Wave theory will be introduced through the study of light and sound. This course will appeal to students who enjoy applying problem-solving to real world situations.

#### Physics IB 11/12 – PHYE4S/PHYB4S

The IB Physics course provides a solid foundation in classical physics including mechanics, optics, waves, thermodynamics and electromagnetism. In addition, students enrolled in IB Physics will study topics in modern physics, including atomic and nuclear physics with an introduction to quantum theory and an option for the study of special relativity. Students will continue their study of environmentally relevant topics like future energy sources. Reflecting the nature of this experimental science, the IB physics curriculum demands a large practical component and an interdisciplinary group project in conjunction with IB Biology and IB Chemistry. Students who follow this course of study are generally very well prepared to take university physics and engineering programs. IB Physics is offered at both Standard and Higher Levels.



#### Computer Science IB 11 – CSSB3S

This is the first of two computer science courses following the IB curriculum. Topics include: Systems Design, Computer Organization, Networks, Concurrency, Abstract Data Structures, Algorithms Analysis, Object-Oriented Programming, Control Structures, Resource Management, and Databases. Students will develop an understanding of utilizing programming control structures and a variety of problem solving skills/strategies. The programming language which will be used is Java in the NetBeans IDE.

#### Computer Science IB 12 – CSSB4S

This is the second of two computer science courses following the IB curriculum. Topics include: Abstract Data Structures (Linked Lists, Stacks and Queues), Binary Trees, Recursive Algorithms, Systems Design, Computer Organization, Networks, Concurrency, Abstract Data Structures, Recursion, Object-Oriented Programming, Control Structures, Resource Management, Databases, and Random Access Files. The programming language which will be used is Java in the NetBeans IDE. Students will also be completing a large-scale software application and participate in the G4 crosssubject collaborative group project.

#### **GROUP 5 - MATHEMATICS**

#### Intro to Applied and Pre-Calculus Mathematics IB 10 – IAPB2S

This course is taken in Semester I of the Grade 10 year. Students should be willing to work hard to master concepts. Students will develop spatial sense and proportional reasoning through measurement, algebraic reasoning and number sense, and algebraic and graphical reasoning through the study of relations and functions. Students will engage in activities that include problem solving, mental mathematics, and theoretical mathematics. A scientific calculator is required.

#### Pre-Calculus Mathematics IB 11 – PCMB3S

This course is taken in Semester II of the Grade 10 year. This course comprises a highlevel study of theoretical mathematics with an emphasis on problem solving and mental mathematics. Topics include algebra, quadratic functions, reciprocal functions and trigonometry. A scientific calculator is required. At the end of Grade 10, IB students will have obtained two credits in Math.

#### Pre-Calculus Mathematics IB 12 – PCMB4S

This course is taken for the entire Grade 11 year. It builds on topics studied in Pre-Calculus 10 & 11 and provides background knowledge and skills for the study of calculus. Topics include: transformations of functions, trigonometric functions, exponential functions, logarithmic functions, polynomial functions, radical functions, rational functions, and the binomial theorem. A scientific calculator is required.



### Analysis and Approaches Mathematics IB 12 – MASB4S

This course is taken for the entire Grade 12 year. Topics include number and algebra, functions, geometry and trigonometry, statistics and probability and calculus. Emphasis is placed on problem-solving, reasoning and inquiry approaches to real-world applications. Students investigate various areas of mathematics and independently write an exploration for the IB Internal Assessment. A graphing calculator is required. Students write the IB Mathematics Analysis and Approaches Standard Level examination in May of their Grade 12 year.

## INTERNATIONAL BAC PROGRAMME (IB)

#### **GROUP 6 - THE ARTS**

\*\*A minimum of ten students required to offer these courses\*\*

#### Music IB 11/12 - MUSB3S/4S

Open to all students

This is a study of music through practical, informed and purposeful explorations of diverse musical forms, practices and contexts. The course ensures learning with equal importance to the roles of performer, creator and researchers.

#### Visual Arts 11/12 - VIAB3S/4S

This is an art program designed for the student with a strong motivation and interest in art. This is, in effect, a two-year program:

Year 1 - This course is available to IB as well as non-IB students on the recommendation of an art teacher. The first year of this course focuses mainly on developing both research and media skills for art making. A deeply intense examination of the artistic and creative process includes gallery visits, workshops with artists, and an expectation of commitment to research, sketchbook work and studio work throughout the year.

Year 2 - The majority of class time will be devoted to individual studio work and art-related visits and excursions. IB students wishing a Higher Level credit in Visual Arts must complete both studio and sketchbook options. Standard Level students choose primarily either studio or sketchbook work to be examined externally.



#### CORE REQUIREMENTS

### Theory of Knowledge 11/12 (two half credits) – THKB3S/THKB4S

This is a full course taken over a two-year period. Theory of knowledge (TOK) explores questions about knowledge and the process of knowing. TOK emphasizes comparisons and connections between areas of knowledge and encourages students to become more aware of their own perspectives and the perspectives of others.

#### Extended Essay (non-credit) – EXEY4G

The extended essay (EE) presents students with an opportunity to explore a self-chosen topic of special interest. The EE helps students to develop independent self-regulated research and writing skills.

#### CAS (non-credit) - CSHB4G

Creativity, activity, service (CAS) provides students with the chance to participate in a range of experiences alongside their academic studies. The three strands of CAS are creativity (arts, and other experiences that involve creative thinking), activity (physical exertion contributing to a healthy lifestyle) and service (an unpaid collaborative and reciprocal engagement with the community).

# **KELVIN HIGH SCHOO**

### Hours: Monday to Friday, 8:30 am to 4:00 pm during the school year

The Library is closed during the school's Winter, Spring and Summer breaks.

#### What does Kelvin's Library contain?

- Kelvin High School Library contains a comprehensive collection of materials in a wide variety of print and electronic formats:
- Books, graphic novels, reference materials including network and Internet based resources;



- WSD library search engine providing access to all books, audio-visual media on offer in the Library and direct access to Internet resources, including comprehensive on-line platforms such as EBSCOhost, CBC's Curio collection, Discovery Education and Newspaper Archive;
- Many of these platforms are available to staff and students via their home computers please ask at the Library's Circulation Desk for the school user ID and password;
- Visit the Kelvin High School Library Page by clicking on the link under Student Resources from the Kelvin website, or directly through the following link: bit.ly/kelvinlib and Instagram @kelvinclipperslibrary
- Additionally, Kelvin's Library contains a large collection of Kelvin High School yearbooks, dating from the school's earliest years to the present. These are available for viewing on site only.

#### Who staffs Kelvin High School Library?

• Our Library is staffed by a teacher-librarian and full time library support clerk.

#### What instructional supports does the Library provide?

- The Library is a centre for resource-based learning: classes are frequently scheduled for shortand long-term assignments on a variety of information and literacy activities; and learning seminars are offered monthly.
- Kelvin's Library contains an extensive fiction collection, supporting both leisure reading and their studies;
- Additionally, students are welcomed to the Library throughout the day for class based projects, quiet study, and leisure reading.

#### Do students need a library card to borrow items?

• YES - In the fall students will receive a photo student card (the Winnipeg Transit "GO" card) upon having their photo taken. Kelvin students must present the "GO" card when borrowing Library materials.

#### How many items may be borrowed and how long can they be kept on loan?

- Up to 3 items may be borrowed at any given time. Items are due in two weeks and may be renewed, if no other requests have been placed on the item;
- Loan privileges are suspended until overdue items are returned. Please remember that all Library materials are school property and that students are responsible for vandalism, loss and/or serious damage to items borrowed.

Students using Library computer search stations must abide by the terms of Kelvin High School's Responsible Use Policy for computer hardware and software. Please remember that computer search stations are provided for research and completion of assignments.

# **JOB OUTLOOKS**

This resource is intended to help students make informed decisions about their course selections by aligning their interests with potential career paths. It is designed to assist in planning for future educational and career goals.

#### English

Social Media Manager, English Teacher, Marketing Journalist, Copywriter, Editor, Human Resources, Fundraiser, Event Planner....

#### **Pre-Calculus Math**

Aerospace, Data Analyst, Actuary, Investment Analyst, Dentist, Doctor, Vet, Math Teacher, Engineer, Meteorologist...

#### **Applied Math**

Trades, Sustainability Manager, Community Development, Supply Chain Logistics, Digital Media, Graphic Design, Cybersecurity, Market Researcher, Risk Management..

#### **Essential Math**

Administration, Customer Service, Teacher Education, Journalism/Media, Marketing, Sales, Service, Automotive, Machinists...

#### Biology

Doctor, Nurse, Pharmacist, Physical Therapist, Microbiology, Conservation, Genetics Counsellor, Food Scientist, Forensic DNA Analyst, Health Education...

#### Gym/Health

Occupational Therapist, Fitness Instructor, Sports Coach, Event Management (in Sports Venues), Dance Instructor, Athletic Therapy...

#### **Physics**

Engineering, Computer Sciences/Technology, Environmental Law, Environmental Sciences (Conservation or Renewable Energy) Medicine (Doctor, Radiology, Biophysics, Astronomy or Space Sciences...

#### Chemistry

Chemist, Chemical Engineering, Biomedical Scientist, Quality Control, Cosmetic Lab Assistant, Healthcare Support, Waste Management, Water Treatment Operators...

#### **Foods/Nutrition**

Food Scientist, Health Educator, Sensory Scientist, Chef, Line Cook, Server/Waitstaff, Bakers, Dietary Aide, Nutritionists, Sport Nutritionist,...

#### **Computer Science**

Software Developer, Computer Engineer, IT Manager, Business Intelligence Analyst, IT Project Manager, Network Support, Ethical Hacker, Instructional Designer...



#### Law

Lawyer, Legal Aide, Corporate Council, Public Defender, Judicial Clerk, Legal Analyst, Legal Educator, Mediator, Policy Analyst, Legal Journalist...

#### Economics

Economist, Human Resources, Data Scientist, Real Estate Analyst/Agent, Not for Profit Manager, Health Economist, Investment Banker, Financial Planner...

#### **Visual Arts**

Painter, Illustrator, Art Teacher, Graphic Designer, Branding Specialist, Product Designer, Space Planner, Architect, Urban Planner, Fashion Designer, Game Designer,,,

#### Drama

Theatre Director, Actor, Playwright, Stage Manager, Casting Director, Talent Agent, Theatre Admin, Movie Critic, Set Designer

#### Trades

Top 11 Canadian Red Seal Trades with the highest number of registrations of people under 20: Construction electrician, Carpenter, Automotive service technician, Plumber, Welder, Hairstylist, Steamfitter/pipefitter, Heavy duty equipment technician, Cook, Industrial mechanic (millwright), Industrial electrician

#### **Graphics/Digital Design**

Marketing Specialist, Game Designer, Advertising Designer, Creative Director, Web Designer, Front-End Developer, Content Creator, Fine Artist, Illustrator, Animator...

#### **Specialized Communication**

A great job aide to help be able to communicate in today's workforce, especially navigating a corporate environment.

#### **Current Topics First Nations, Métis, Inuit**

Indigenous Community Liaison, Cultural Advisor/ Educator, Social Worker, Indigenous Rights Advocate, Indigenous Health Worker, Indigenous Languages Specialist, Indigenous Economic Development Officer, Journalist/Writer, Diversity/ Inclusion Manager..

#### History

Historian, Archivist, Teacher/Educator, Librarian, Museum Curator, Government Analyst, Journalist/ Writer, Lawyer/Legal Assistant, Public Historian, Business Analyst...

#### **Global Issues, Citizenship & Sustainability**

Environmental Scientist, Nonprofit Program Manager, Corporate Social Responsibility Manager, Diplomat/ Foreign Services Officer, International Development Specialist, Humanitarian Aid Worker, Sustainability Consultant...

#### Geography

Urban Planner, Cartographer/GIS Specialist, Meteorologist, Travel/Tourism Specialist, Real Estate Analyst, Conservation Scientist/Forester, Demographer, Volcanologist...

#### Psychology

Psychiatric Technician, Social Services Coordinator, Psychologist, Human Resources Manager, counselor, Youth Worker, Mental Health Technician, Probation Officer, EMT, Police...

#### Theory of Knowledge

Lawyer, Entrepreneur, Environmental Advocate, Management Consultant, Diplomat, Ethical Al Consultant, Information Literacy Educator, Epistemology Researcher, Systems Thinking Consultant, Public Engagement Strategist...

#### Entrepreneurship

Entrepreneur/Startup Founder, Business Development Manager, Product Manager, Sales Engineer, Venture Capitalist, Social Media Influencer, E-Commerce Specialist, Innovation Manager...

#### Web Design & Interactive Websites

Web Designer, Freelance Web Developer, E-Commerce Director, Content Manager, Digital Marketing Specialist, UI/UX Researcher, Front-End Developer...

#### **Family Studies**

Family Therapist/Counselor, Social Worker, Child and Youth Worker, Family Educator, Human Resources Coordinator, Community Outreach Worker, Parenting Coach, Early Childhood Educator...

#### **Digital Media Production**

Video Producer, Multimedia Journalist, Social Media Content Creator, Digital Marketing Specialist, Film and Video Editor, Motion Graphics Designer, Digital Content Strategist, Web Designer/Developer, Podcast Producer, Freelance Content Creator...

#### Yearbook; Journalism & Production

Journalist, Photojournalist, Editor, Graphic Designer, Marketing Coordinator, Public Relations Specialist, Event Coordinator, Copywriter, Brand Manager, Digital Archivist, Digital Content Producer, Marketing Research Analyst...

#### Photographer

Travel Photographer, Blogger, Photo Lab Technician, Instructor, Content Creator, Studio Assistant, Photo Editor, Forensic Photographer, Sports Photographer, Magazine Editor, Photography Equipment Technician, Photobook Publisher...

#### Wellness in the Arts

Art Therapist, Art Educator, Creative Arts Coordinator, Health Promotion Officer, Therapeutic Recreation Specialist, Expressive Arts Facilitator, Cultural Programs Manager...

#### Dance

Dance Instructor, Choreographer, Studio Manager, Dance Program Director, Performance Artist, Cheerleader/Stunt Team Member, Artistic Director, Fitness Instructor...

#### Languages

Speech Language Pathologist, Language Teacher, ESL Instructor, Translator, Literary Agent, Global Affairs Consultant, Humanitarian Aid Coordinator, International Trade Specialist, Policy Advisor, Museum Curator, Archivist, etc.

#### Music

Musician/Performer. Music Teacher/Instructor, Sound Engineer, Music Producer Mixing/Mastering Engineer, Composer, Arranger, Music Therapist, Artist Manager, Booking Agent, Concert Promoter, Public Relations Specialist (Music), Stage Manager, Audio/Visual Technician, Music Critic, Music Blogger, Music Licensing Agent, Software Developer (Music), Sound Designer

#### **Global Politics**

Diplomat, Political Analyst, International Relations Specialist, Foreign Service Officer, Policy Advisor, Political Scientist, Ambassador United Nations Officer, International Trade Specialist, Human Rights Advocate, Political Campaign Manager, Public Affairs Specialist, Political Consultant, Lobbyist, Government Relations Specialist, International Development Specialist, Peacekeeping Officer



### ÉCOLE SECONDAIRE KELVIN HIGH SCHOOL

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