## ÉCOLE SECONDAIRE KELVIN HIGH SCHOOL



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# ÉCOLE SECONDAIRE KELVIN HIGH SCHOOL 

We welcome both new and returning students to our school community. At Kelvin, we see ourselves as part of a caring team who work with students and their families to encourage the academic and personal development of all learners. As Kelvin administrators, we are seeking to build a positive school environment where every student is valued and challenged.


Our school has a population of approximately 1350 students. We are very proud to offer an academic English Program, a French Immersion Program and an International Baccalaureate Diploma Programme. In addition to our compulsory courses, we offer a wide variety of options to suit the varied interests and talents of each student.

Our school also provides a strong extracurricular program including student leadership, athletic teams, performing arts, special interest clubs, and opportunities to be part of groups and projects which promote social awareness and responsibility such as Kelvin Causes Committee and Youth in Philanthropy. In our quest to improve our school and meet the evolving needs and interests of our students, we have added certificates in the Performing Arts and Fine Arts which students will receive upon graduation.

In this handbook, you will find information about our school and the services we provide as well as a comprehensive guide to program planning and course selection. At Kelvin, we value ongoing communication with families to ensure that students are supported throughout their years with us. Please do not hesitate to contact us with your thoughts, ideas and concerns.

We are looking forward to working with you and your families.

## Maria Silva (Principal)

Kim Gauthier (Vice Principal)
Cree Crowchild (Vice 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 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 one of the most important components of academic success. Whenever students are absent from class parents are encouraged to telephone the school. An automated calling system will contact the home every time a student is absent unless a parent/ guardian calls. In addition to this, parents/ guardians will receive one notification letter for the first course where a student reaches 5 absences. Teachers will also contact parents when a student accumulates 7 absences in a course and at 10 absences students will be placed on credit probation. At any time in this process parents are encouraged to contact the appropriate grade administrator. When a student's credit is placed on probation, a letter is also sent home to parents with an update of the student's attendance as well as a copy of the probation form. If there are special circumstances which require your son/ daughter to be away for an extended period of time, please contact the school.

Travel forms are required for personal trips (3 days or longer). These forms are available from the either the main or student offices.

## 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 and recyclables into the boxes provided.

## COMPUTER USE POLICY / MEDIA RELEASE FORM

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

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 nonDivision publication(s).

## SMOKING

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) and e-cigarettes.

## 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.

## TELEPHONE

There is a pay phone near the office that is available for student use. If urgent, students may approach the student office staff to use a phone. Please note, the use of cell phones is not permitted in classrooms, unless teacher dictated.

## 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 on a monthly basis 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.

# STUDENT SERVICES 

## COUNSELLING

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

- academic programming comprising course selection and support
- career counselling, post-secondary education and scholarship information
- personal/social issues that affect the student's psychological, emotional, social, physical, mental and academic well beingCounsellors also function in a consultive capacity to students, parents and teachers. When special services are required, referrals are made to the Clinical Support Services and outside agencies.

Students can be assured that personal concerns will be discussed in a caring, confidential and supportive atmosphere.
Parents and students are invited to make an appointment by contacting our Guidance secretary at 204-474-1156 or by visiting the Guidance Office.

## RESOURCE

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, special education teacher, resource teacher and student services team.

## TUTORING

Peer tutors may be arranged to provide individualized academic support. Students requiring a tutor should go to Room 23 and fill out an application. Tutoring often takes place before, at lunch, or after school.

KELVIN HIGH SCHOO

## 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 provide details on how to join the various activities.

## STUDENT COUNCIL

Student Council provides a wonderful and varied way for students to become involved in school activities. It also provides opportunities to develop and take on leadership roles. Every year we hold elections to select co-presidents. Other executive positions such as secretary and treasurer are appointed. Open council meetings are held once a week at lunch hour and anyone interested is encouraged to attend. Executive meetings are also conducted weekly. Council assumes a variety of roles in the Kelvin community. They plan events as varied as House System, Spirit week, barbeques, fundraisers for charities, and Halloween.
Members 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 is often 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 always it's about stepping up and trying to make a difference.

## 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.


## SPECIAL INTEREST CLUBS

Among these are:

- Gaming Club
- Paper Clip (school newspaper)
- Reach for the Top
- Dance Troupe
- Debate Club
- Improv
- H.A.S.T.A. (social justice)
- Rocky Mountain Club
- Youth in Philanthropy (YIP)
- Indigenous Student Group
- Gender Issues
- Spectrum (Gay Straight Alliance)
- Teen Talk
- E.A.C. (Environmental Action Committee) In order to function as a club sponsored by the school, groups require a staff sponsor. Once this has been arranged, an approach may be made to the Principal for recognition.


## STUDENT ACTIVITI

## 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, and musical theatre.


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, and Clue the Musical.
- Theatre - recent productions: Proof, Waiting for Godot, Top Girls, The Crucible
- Improv - competes in the high school Improv league with the chance of competing nationally.
- Winter choir and band concerts.
- Class Act - 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 - in the past few years, Banff, Calgary, Edmonton, Vancouver, Chicago, Minneapolis, St. Louis and New York City
- Arts Festival (June)
- 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.


## INTERNATIONAL BACCALAUREATE PROGRAMME

International in perspective and designed for the talented student 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 wishing to enter IB in Grade 10 must have French. Application procedures are explained to all interested Grade 9 students and parents at an orientation meeting held each February.

## PLANNING YOUR HIGH SCHOOL PROG

Your high school program should be planned very carefully based on many different pieces of information. What are your academic strengths and weaknesses? 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

Complete the application form carefully and have it signed by a parent or guardian. Also please ensure that all information is accurate to prevent delays in your registration.
Under the Schools of Choice policy, priority must be given to École secondaire Kelvin High School catchment area students. New students must submit a copy of their most recent report card along with their application form. In addition to this, if you are registering in the Winnipeg School Division for the first time, please include confirmation of residency (driver's license, utility bill, etc). Also note that all non-catchment area students applying will be put on a waiting list until student enrollment is determined.

NOTE: It is important that applications be in by the deadline indicated on the application form. Students who submit these applications past the deadline will be scheduled into courses only where space is available.

## MANITOBA EDUCATION HIGH SCHOOL PROGRAMS

## HIGH SCHOOL ACADEMIC REQUIREMENTS

The Department of Education requires that students accumulate a minimum of thirty credits to graduate. At École secondaire Kelvin High School students are required to take the compulsory courses as listed below. In addition to these, students may select courses based on their personal interests and future academic needs.

| GRADE 9 | GRADE 10 | GRADE 11 | GRADE 12 |
| :---: | :---: | :---: | :---: |
| ELA 10F | ELA 20F | ELA 30S | ELA 40S (2 CREDITS) |
| MATH 10F | MATH 20S | MATH 30S | MATH 40S |
| SCIENCE 10F | SCIENCE 20F | SCIENCE 30S | 2 ADDITIONAL 40 |
| SOCIAL STUDIES 10F | GEOGRAPHY 20F | HISTORY 30S | FOR GRADUATION* |
| PHYS. ED. 10F | PHYS. ED. 20F | PHYS. ED. 30F | PHYS. ED. 40F |

*Requirements for university entrance vary. Please check with a counsellor to verify.

## FRENCH IMMERSION DIPLOMA

In order to receive an immersion diploma from Kelvin High School, a minimum of fifteen out of the thirty credits for graduation must be taken in French.

| 9E ANNÉE | 10E ANNÉE | 11E ANNÉE | 12E ANNÉE |
| :---: | :---: | :---: | :---: |
| FRANÇAIS 10F | FRANÇAIS 20F | FRANÇAIS 30S | FRANÇAIS 40S |
| ELA 10F | ELA 20F | ELA 30S | ELA 40S (2 CREDITS) |
| MATHÉMATIQUES 10F | MATHÉMATIQUES <br> $20 S$ | MATHÉMATIQUES <br> $30 S$ | MATHÉMATIQUES <br> $40 S$ |
| SCIENCES 10F | SCIENCES 20F | SCIENCES 30S | ED. PHYS. 40F |
| SCIENCES HU- <br> MAINES 10F | GÉOGRAPHIE 20F | HISTOIRE 30S | 2 ADDITIONAL 40 <br> LEVEL COURSES |
| ED. PHYS. 10F | ED. PHYS. 20F | ED. PHYS. 30F | FOR GRADUATION* |

*Requirements for university entrance vary. Please check with a counsellor to verify.

## COMPULSORY COURSES

## 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.

\author{

- Stephen D. Krashen
}



## COMPULSORY COURSES

## 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

Grade 9 English provides students with a core curriculum covering reading, writing, listening, speaking, viewing and representing. The course will include a variety of Literary and Transactional texts: literary texts may include novels, short stories, plays and poems, forms and genres wherein language is employed to engage, to express and to bring aesthetic pleasure; transactional texts include both formal and informal forms and genres wherein language is used pragmatically to inform, to explain, to persuade, to argue and to plan.

## English 9 Honours - ENGE1F

This course is for students who love to read and who are interested in the study of literature. Students will study literary genres, such as the novel, the short story, poetry, drama (including Shakespearean drama) and non-fiction. Works are selected so that students experience literature from different time periods and, possibly, from a variety of cultures. Though very rewarding, students must understand that this course requires a significant amount of very challenging reading. Although not a prerequisite, students interested in Kelvin's IB (International Baccalaureate) programme are encouraged to enroll in this course.

## English 9 Immersion - ENGF1F

This course is identical to the regular English 9 course with the exception that students in Kelvin's French Immersion program take English for only one semester.


ENGLISH 10

## English 10 - ENGR2F

Prerequisite: English 9
Grade 10 English continues to promote competent and confident reading, writing, listening, speaking, viewing and representing. In addition to offering a variety of language experiences and a variety of works, the purpose of English 10 is to have students develop critical thinking, as well as written and oral communication skills in preparation for both Literary and Transactional options in grade 11.

## BRIDGING

## English 10/11 E - ENGR2E/ENGR3E

The English " $E$ " credit is a course for students with developing literacy skills as determined by Kelvin's formal language assessment process. Emphasis is on listening, speaking, reading, writing, viewing, and representing in a variety of combinations and through a wide range of relevant texts. In addition, some language study and exposure to culture may be components of the curriculum. The course is delivered by the English Department and is a prerequisite to grade 10 or 11 regular English courses so that students can be more successful in the regular English program.
École secondaire Kelvin High School recommends strongly that EAL learners take this course.

## COMPULSORY COURSES

## 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. The following diagram may assist parents and students in understanding the "Lit - Trans" distinction.

## LITERARY

 or TRANSACTIONAL

In a Lit. class, you will spend more time looking into the work of literature, talking about art or craft, about 'big' ideas, about how literature is vital to life.


In a Trans. class, you will spend more time looking out from the work of literature, talking about purpose, about communication of ideas, about how language is vital to life.

BOTH require equal amounts of reading and writing.

## 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. Though 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. Though 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 take both courses, though only one credit is needed at the grade 11 level.

## COMPULSORY COURSES

## ENGLISH 12

Students are required to take TWO credits of English 12:

Language and Literary Forms 12 and English 12 Literary Focus
OR
Language and Transactional Forms 12 and English 12 Transactional Focus


## First semester: September - January

Language and Literary forms - ENLS4S
Prerequisite: English 11 Literary or Transactional
The course is an advanced study of language and literature. All forms of writing and responding to materials are designed to allow students to develop insight into and enjoyment of literature.

Language and Transactional forms - ENTS4S Prerequisite: English 11 Literary or Transactional

The course is an advanced study of language and transactional materials. All forms of writing and responding to materials are designed to allow students to gain insight into and experience with transactional forms and styles of language.

## Second semester: February - June

## English Literary focus - ENGL4S

Prerequisite: English 12 Language and Literary forms
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. Students will write the English 12 Provincial Standards Test as the final exam for this course.

## English Transactional focus - ENGT4S

Prerequisite: English 12 Language and Transactional forms

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. Students will write the English 12 Provincial Standards Test as the final exam for this course.

## COMPULSORY COURSES

## ENGLISH 12

The Major Paper or Major Individual Paper (MIP)
As part of the grade 12 English program at École secondaire Kelvin High School, students must complete a major paper as part of the two mandatory credits.


Timeline - the process and product will be explained before the end of the first semester (the end of January), and the paper will be complete before the end of March (before Spring Break).
Value - the major paper is worth $30 \%$ of a student's final grade. The $30 \%$ is divided between the process and the product, though the specific details of the division rest with each teacher. Similarly, the individual teacher has discretion regarding the portion of the 30\% that belongs to each semester and credit.

Switching sections - though never ideal, there are occasions when a student needs to switch sections and/or teachers at the end of the first semester; when this occurs, the student must complete the major paper with the teacher who began the process. In other words, the first semester teacher is the mentor and the marker for a student's major paper.

## COMPULSORY COURSES

## 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 all designated with the "S" code. There are three possible "S" streams: Applied, Essential/Consumer and Pre-Calculus. The intent of these streams is described as follows:

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

## Mathematics Foundations 9 - MATR1F

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: Number sense, Patterns and Relations, Shape and Space, Statistics and Probability. This is a full year course, taken every day. Students will write their final exam in June.

## Advanced Mathematics Foundations 9 - MATE1F

This course will cover the same material described in the Mathematics Foundations 10F course, but will be taught at a quicker pace and there will be a heavier workload. Enriched, group and project work will be consistent within the course. This is a good preparation course for the International Baccalaureate Program, but is not a prerequisite. A minimum mark of $85 \%$ in Grade 8 mathematics is highly recommended for this very challenging Grade 9 course. This is a full year course, taken every day. Students write their final exam in June.


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

(recommended Gr 9 mark 70\% or more)
This course is intended for students considering post-secondary studies that require a math pre-requisite. This course provides students with the mathematical understanding and critical-thinking skills that have been identified for specific post-secondary programs of study. Components of the curriculum are both context driven and algebraic in nature. 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 APMR3S and/or PCMR3S.

## Grade 10 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.

## COMPULSORY COURSES

## MATHEMATICS PATH

## 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 outside of the province, it may not be recognized at universities, so check with the Guidance department.

## APPLIED 11/12

This stream can be quite demanding and calculator/computer based. These courses stress application of theory studied in the Pre-Calculus stream. Students thinking of pursuing studies in Engineering, Architecture, and Sciences should consider this stream as an addition to the Pre-Calculus stream. Note that Applied Math 40S is not accepted by the University of Manitoba as a prerequisite to the first year Calculus course. As a result, an upgrade course may be required at your expense. Red River College accepts it for most of its courses. Strongly recommend a smart phone or tablet as apps will be used throughout the course.

## PRE-CALCULUS 11/12

This is the standard university entrance stream accepted by all universities and colleges for admittance to all faculties. These courses are for students who will pursue post-secondary studies (usually involving Calculus) where high level mathematical skills will be further developed and applied. Note that some faculties require a minimum grade in the Pre-Calculus 40S course for admission.


## MATHEMATICS PATH COURSES

## 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. Strongly recommend a smart phone or tablet as apps will be used throughout the course. Topics include: Measurement, Geometry, Logical Reasoning, Statistics, Relations and Functions.
Pre-Calculus Mathematics 11 - PCMR3S (Recommended mark of 70\% in IAPR2S)

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

## COMPULSORY COURSES

## 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. Strongly recommend a smart phone or tablet as apps will be used throughout the course. Topics include: Financial Mathematics, Logical Reasoning, Probability, Relations and Functions, and Design and Measurement.
Pre-Calculus Mathematics 12 - PCMR4S (Recommended PCMR3S mark of 70\% or more)
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 30S 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.


## Advanced Mathematics/Calculus 12

- ADMR4S/CALR4S

Prerequisite: PCMR4S
This course combines Advanced Mathematics 45S (ADMR4S) and Calculus 45S (CALR4S) which will appear as two $1 / 2$ credits on the report card. This course is highly recommended for students who are particularly interested in Mathematics and intend to specialize in Math related courses ie: Calculus at university. PreCalculus Mathematics (PCMR4S) is a required course for entry to university, whereas this course is not unless entering a math program in Ontario. This course is useful for those preparing for the Waterloo Euclid Contest.

## MATHEMATICS INFORMATION

## 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 20S, 30S and 40S Pre-Calculus by practicing problems that do not involve calculator use. Such problems have answers that are exact or purely symbolic.


## MATHEMATICS 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


## MATHEMATICS INFORMATION

One Math credit is required at each level Grade 9 to Grade 12. Other credits obtained are complementary. Use of a scientific calculator is allowed in all Mathematics courses. Calculators with statistics functions and graphing capabilities are especially useful in the Pre-Calculus/Applied courses.

In order to be successful in mathematics, daily revision of previous notes, assignments and tests is necessary. Students are responsible for all missed notes and assignments and for standard supplies such as suitable calculators, geometry sets and writing materials.

## COMPULSORY COURSES

## SCIENCES

A Science course is compulsory in Grades 9, 10, and 11.

## Science 9 - SCIR1F

This course is an introduction to four branches of science: biology, chemistry, physics and astronomy. By studying reproduction, the atom and elements, electricity and the universe, students will experience these diverse areas of science, preparing them for the Grade 10 Science program. Development of laboratory skills and an understanding of the processes of science are desired outcomes of this course.

## Science 10 - SCIR2F

This course continues the study of biology (sustaining ecosystems), chemistry (chemical reactions), and physics (motion) and also introduces environmental science with a unit on weather dynamics. This program prepares students to make informed science course selections at the Grade 11 and 12 levels. Further development of laboratory skills and an understanding of the role of science in daily life are also fostered in this course.

## Science 10 Option (Advanced Topics in Science) - CTSR3S

This optional course is an enrichment course offered as an option primarily to grade 10 students who are keenly interested in learning more about science-based topics that affect our world today. The course is in addition to Grade 10 general science SCIR2S and does not replace it. Students will explore problems and issues that demonstrate interdependence among science, technology, society, and the environment. The emphasis will be towards environmental science and sustainability. Areas of study may include but are not limited to climate change, sustainable development, alternative energies, clean water initiatives, ethics in genetics, and space travel. These topics are flexible and subject to change based on the nature of what issues are currently important in the world. There will be a significant lab component to the course.


## Science 11 - SCIR3S

This course provides an option for students who wish to continue in science, but who do not wish to take the traditional courses concentrating on biology, chemistry or physics. Science 30S provides students with the opportunity to study science in a more integrated manner and develop proficiency in a variety of laboratory skills. With the goal of developing scientific literacy, students participate in selecting topics studied. This course gives students a "hands on" opportunity to increase their understanding of science and technology in the real world.

## Biology 11 - BIOR3S

Biology 30S deals with human anatomy and physiology, wellness and homeostasis. The core topics include the biochemistry of nutrition and the circulatory, respiratory, digestive and nervous systems. Using a variety of practical activities, students investigate aspects of health and lifestyle related to human biology.

## Biology 12 - BIOR4S

The core of this course deals with genetics and heredity, evolution, biodiversity and classification. Students will learn about related societal issues and applications to daily life. Standing in BIOR3S is strongly recommended.

## Chemistry 11 - CHER3S

Recommended prerequisite: Introduction to Applied \& Pre-Calculus Mathematics 10
This course builds on the foundation of chemistry from Grade 9 and 10 Science with an emphasis on problem solving and quantitative analysis. The curriculum stresses the basic principle that the properties of matter are the consequence of the structure of matter. Topics studied include: properties of matter, chemical reactions, organic chemistry, gases and solutions.

## Chemistry 12 - CHER4S

Recommended prerequisites: Chemistry 11 and either Applied Math or Pre-Calculus Math
Through participation in co-operative experiments and other classroom experiences, students will develop skills for the safe handling of materials, careful observation and measurement, effective problem solving and precise communication. This course is designed to prepare students for further study in chemistry at the university level and to develop the attitudes and abilities that enable students to become informed decision makers who are knowledgeable about the role of chemistry in the world around them. Topics covered in the course include: atomic structure, equilibrium, acids and bases, electrochemistry and aqueous reactions.


## Physics 11 - PHYR3S

Recommended prerequisite: Introduction to Applied \& Pre-Calculus Mathematics 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

Recommended prerequisite: Physics 11 and either Applied or Pre-Calculus Mathematics
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.

# COMPULSORY COURSES 

## SOCIAL STUDIES

Social studies courses are compulsory for grade nine Social Studies, grade 10 Geography and grade eleven 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. This is a semestered course.

## 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 Aboriginal self-government. Emphasis will be placed on preparing students for a University entrance level course.

# COMPULSORY COURSES 

## 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.



Active Healthy Lifestyles (General) 11 - PHER3F
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.
NOTE: Parents/guardians will be required to review their son/daughter'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. Parents / guardians will also be required to verify the entries of their son/daughter's physical activity log through a sign-off procedure.

# COMPULSORY COURSES 

## Active Healthy Lifestyles (Personal Fitness) 12 - PHER4F

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 $25 \%$ 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.

NOTE: Parents/guardians will be required to review their son/daughter'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. Parents/guardians will also be required to verify the entries of their son/ daughter's physical activity log through a sign-off procedure.

# 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.

For students who may be considering the IB program after Grade 9, staying in the French Immersion Program is beneficial as it allows students more options in choosing course levels in the final year of IB.

## 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.

## LANGUAGE CONTRACT

All students and parents should have signed a contract with their registration indicating their commitment to speaking French in class with their teachers and peers.


## ORAL ASSESSMENT

Immersion students will participate in our oral language assessment program. Each grade 10 student will have an interview with two Immersion teachers to practice and discuss their oral proficiency. This is to be a formative assessment for the purpose of providing feedback to the students on their areas of strength and the areas where growth is needed. Grade 11 students will continue to focus on improving their oral skills and will be assessed during a round table discussion. A final, summative assessment will take place during the grade12 year.
We hope to help students improve their proficiency in their second language and take pride in their achievement. We also feel that ongoing feedback is important to help students reach a high level of fluency.
Should you have any questions or concerns about this project please feel free to contact Madame Gouthière (mgouthiere@wsd1.org) or Madame Chase (Ichase@wsd1.org).

## 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 inscription en immersion courte et immersion longue. Cours préparatoire: le cours d'immersion pré-secondaire longue ou courte ou son équivalent. Le cours d'immersion est offert 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 jusqu'à 21 cours.
ii. réussir à un examen oral en 12 e année.
iii. un élève peut choisir de suivre $70 \%$ de ses cours au secondaire en français.
iv. 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 comme cours obligatoires livrés en français.
v. 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 |
| MATHÉMATIQUES | MATHÉMATIQUES | MATHÉMATIQUES | MATHÉMATIQUES |
| SCIENCES | SCIENCES | SCIENCES | SCIENCES |
| PHYS. ED. | PHYS. ED. | PHYS. ED. | PHYS. ED. |
| SCIENCES <br> HUMAINES | GÉOGRAPHIE | HISTOIRE | PLUS 2 COURS AU <br> NIVEAU 40 POUR <br> ETTRE DIPLÔMÉ |

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

Cours facultatifs : Biologie 11, 12
Chimie 11, 12
Physique 11, 12
Histoire 12
Problèmes mondiaux 12
N.B. Un minimum de 18 inscriptions est nécessaire pour offrir ces cours. Ces cours offrent aux élèves la possibilité d'élargir et d'approfondir leurs habiletés en compréhension orale et écrite ainsi qu'en production orale et écrite, tout en accordant une attention particulière aux caractéristiques de la communication médiatique.
Deux crédits de français sont nécessaires en 9 e année.

## FRENCH IMMERSION PROGRAM

French Immersion at the Secondary Level continues to provide a challenging program of studies for students who wish to further develop their bilingual abilities. The program first began at Kelvin in 1978. The first group graduated with an average of seven high school credits. Since then, the number of students and courses offered in French has increased noticeably.
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. successfully complete an oral exam in their grade 12 year.
iii. the opportunity exists to complete up to $70 \%$ of their Secondary Program in French.
iv. in view of the linguistic objectives of the program, students must commit themselves to the exclusive use of French in all Immersion classes.
v. given that an important part of the language acquisition is exposure to and participation in out-of-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.

| 9E ANNÉE | 10E ANNÉE | 11E ANNÉE | 12E ANNÉE |
| :---: | :---: | :---: | :---: |
| FRANÇAIS | FRANÇAIS | FRANÇAIS | FRANÇAIS |
| MATHÉMATIQUES | MATHÉMATIQUES | MATHÉMATIQUES | MATHÉMATIQUES |
| SCIENCES | SCIENCES | SCIENCES | SCIENCES |
| PHYS. ED. | PHYS. ED. | PHYS. ED. | PHYS. ED. |
| SCIENCES <br> HUMAINES | GÉOGRAPHIE | HISTOIRE | 2 ADDITIONAL 40 <br> LEVEL COURSES <br> FOR GRADUATION* |

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

Options: Biologie 11, 12
Chimie 11, 12
Physique 11, 12
Histoire 12
Problèmes mondiaux 12
Note: A minimum of 18 students is necessary to offer these courses. These courses offer students the possibility to expand their skills in oral and written comprehension as well as in oral and written production with a special focus on media as a means of communication. The two French language course credits are compulsory in grade 9.

# FRENCH IMMERSION COURSES 

## Français 9 - FILF1F/FICF1F

Les élèves seront capables d'interagir avec une gamme de textes, tels que des contes, 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 ouverts. 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.

This course complements français 10F, allowing students to apply what they have learned and to use those skills in a series of openended projects. Students are encouraged to work autonomously and cooperatively and to challenge themselves in this more creative course.


## Français 10 - FRAF2F

Les élèves seront capables de dégager des relations d'addition, d'opposition, de causalité dans des textes tels que faits divers, textes documentaires, courts articles, lettres ou textes d'opinion. Les élèves seront capables de distinguer les faits, les opinions, les hypothèses, dans des reportages, des bulletins de nouvelles et des entrevues. L'élève sera également capable de rédiger des textes pour transmettre de l'information selon son intention de communication. L'élève appréciera diverses œuvres d'auteurs contemporains; il/ elle interprétera le message du texte poétique à partir de ses expériences.
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 nouvelles littéraires et 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 et 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, short stories and novels. They will be taught to present and defend their point of view and to write with precision.

## FRENCH IMMERSION COURSES

## 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, 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 ses 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 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 21 st 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 Autochtones
2) I'héritage colonial
3) les relations franco-anglaises
4) l'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) The Aboriginal peoples
2) Canada's colonial origins
3) French/English relations
4) The West
5) Canada's global role
6) Social Justice

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

## FRENCH IMMERSION COURSES

## Histoire 12 - HICF4S

(Questions mondiales)
On étudiera les grands courants de la pensée contemporaine, d'inclus 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.

## 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.


## Mathématiques 9 - MATF1F

Le cours des mathématiques de la 9ième année est un cours destiné à tous les élèves de la 9ième année. Un grand échantillon de sujets seront abordés afin de laisser l'élève choisir le cours approprié pour l'année suivante. On étudiera la statistique et la probabilité, la forme et l'espace, les régularités et les relations, et on prévoit développer un fort sens du nombre tout au long du cours.
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: Number sense, Patterns and relations, Shape and Space, Statistics and Probability. This is a full year course, taken every day. Students will write their final exam in June.

## 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 consommation, la résolution de problèmes, la prise de décision et le sens spatial.
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.

# FRENCH IMMERSIONUCOURSES 

## Mathématiques au quotidien 11 - MAQF3S

Le cours de mathématiques au quotidien 30 S 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 10 e année. Les sujets abordés mettent l'accent sur des applications de consommation, la prise de décision et le sens spatial.

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 visé pour les élèves qui ne planifient pas poursuivent des études postsecondaires 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 inclus sont: l'analyse des jeux et numéros, finance d'une voiture et d'une maison, les statistiques, la géométrie et la trigonométrie, les mesures précises, 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

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 ont été identifiées pour des programmes d'études post-secondaires spécifiques. Les composantes du cours sont non seulement contextuelles, mais aussi algébriques. 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. Une tablette ou téléphone intelligent est fortement recommandé pour ce cours.

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 have been identified for postsecondary programs of study. Components of the curriculum are both context driven and algebraic in nature. 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. A smart phone or tablet is strongly recommended for this course.

## FRENCH IMMERSION COURSES

## Mathématiques appliquées 30S - APMF3S

Ce cours est suggéré pour les élèves qui planifient poursuivent des études postsecondaires qui ne demande pas l'étude des mathématiques théoriques. Ce cours demande d'apprendre des habilités de résoudre des problèmes contextuels géométriques et numériques. Le cours bâti sur les connaissances antérieures qui sont enseignées dans le cours introduction aux mathématiques appliquées et pré-calcul 10 (IAPFS). La technologie est une partie intégrale du cours et sera constamment évaluée et appris à travers du cours. Une tablette ou téléphone intelligent est fortement recommandé pour la participation au cours. Les sujets inclus sont : les mesures, 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. Topics include : Measurement, Geometry, Logical Reasoning, Statistics, Relations and Functions.

## Mathématiques appliquées 40S - APMF4S

Ce cours est suggéré pour les élèves qui planifient poursuivent 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 intégrale du cours et sera constamment évaluée et appris à travers du cours. 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. Graphing calculators, spreadsheets or other computer software will be used by students. Topics include : Financial Mathematics, Logical Reasoning, Probability, Relations and Functions, and Design and Measurement.

## Mathématiques pré-calcul 11 - PCMF3S (une note de 70\% ou plus en IAPF2S est fortement recommandée)

Ce cours a été conçu pour des élèves qui envisagent d'étudier le calcul et de poursuivre des études postsecondaires 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 fonctionnes.

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

# FRENCH IMMERSION COURSES 

Mathématiques du pré-calcul 12 - PCMF4S (Une note de $70 \%$ ou plus dans le cours de précalcul 30 (PCMF3S) est fortement recommandée)
Ce cours est destiné pour les élèves qui planifient étudiér le calcul et les matières reliées à ce sujet dans leurs études post-secondaires. Les sujets étudiés élaborent les sujets enseignés en précalcul 30 S 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 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 Pre-Calculus 30S 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 à quatre branches de la science: La biologie, la chimie, la physique, et l'astronomie. En étudiant la reproduction, l'atome et les éléments, l'électricité et l'univers, les élèves vont être exposés aux domaines diverses de la science, tout en leur préparant pour le cours de Sciences naturelles de 10 e année. Le développement des habilités de laboratoire et une connaissance des processus de la science sont les résultats d'apprentissages désirés de ce cours.
This course is an introduction to four branches of science: biology, chemistry, physics and astronomy. By studying reproduction, the atom and elements, electricity and the universe, students will experience these diverse areas of science, preparing them for the Grade 10 Science program. Development of laboratory skills and an understanding of the processes of science are desired outcomes of this course.

## Sciences naturelles 10 - SCIF2F

Ce cours continue l'étude de la biologie (la dynamique des écosystèmes), la chimie (les réactions chimiques), la physique (le mouvement et l'automobile) et présente aussi la science environnementale (la dynamique des phénomènes météorologiques). Ce programme prépare les élèves à faire leurs choix des cours de sciences aux niveaux des 11 e et 12 e années. Un développement continu des habilités de laboratoire et une compréhension du rôle de la science dans la vie quotidienne sont aussi stimulés lors de ce cours.

This course continues the study of biology (sustaining ecosystems), chemistry (chemical reactions), physics (motion) and also introduces environmental science with a unit on weather dynamics. This program prepares students to make informed science course selections in Grade 11 and 12. Further development of laboratory skills and an understanding of the role of science in daily life are also fostered in this course.

## Biologie 11 - BIOF3S

Le cours de Biologie 30S traite l'anatomie et la physiologie humaine, le bien-être et l'homéostasie. Les sujets principaux incluent la biochimie de la nutrition et les systèmes circulatoire, respiratoire, digestif et nerveux. A l'aide d'une variété d'activités pratiques, les élèves font une investigation dans les aspects de la santé, et du style de vie, liés à la biologie humaine.

Biology 11 deals with human anatomy and physiology, wellness and homeostasis. The core topics include the biochemistry of nutrition and the circulatory, respiratory, digestive and nervous systems. Using a variety of practical activities, students investigate aspects of health and lifestyle related to human biology.

# FRENCH IMMERSION COURSES 

## Biologie 12 - BIOF4S

Ce cours traite la génétique et l'hérédité, l'évolution, la biodiversité et la classification des organismes. Les élèves vont apprendre au sujet des enjeux sociaux et les applications de la matière étudiée à la vie quotidienne. La possession d'un crédit en BIOF3S est fortement suggéré.

The core of this course deals with genetics and heredity, evolution, biodiversity and classification. Students will learn about related societal issues and applications to daily life.

## Chimie 11 - CHEF3S

Cours préalable suggéré: Introduction aux mathématiques appliquées et pré-calcul 10

Ce cours se construit à partir des fondements de la chimie présentés en science 9 e et 10 e tout en accentuant la résolution de problème et l'analyse quantitative. Le programme d'études adhère au principe de base qui affirme que les propriétés de la matière découlent de sa structure. La matière à l'étude comprend les propriétés de la matière, les réactions chimiques, la chimie organique, les gaz et atmosphère et les solutions.

Recommended prerequisite: Intro to Applied and Pre-Calculus Mathematics 10

This course builds on the foundations of chemistry from Grade 9 and 10 Science with an emphasis on problem solving and quantitative analysis. The curriculum stresses the basic principle that the properties of matter are the consequence of the structure of matter. Topics studied include: properties of matter, chemical reactions, organic chemistry, gases and solutions.

## Chimie 12 - CHEF4S

Cours préalable suggéré: Chimie 11 et mathématiques appliqués ou mathématiques précalcul

Grâce à la participation aux expériences coopératives et à d'autres expériences en salle de classe, les élèves développeront les habiletés nécessaires pour manipuler en sécurité des matériaux chimiques, pour faire des observations et mesures soignées, pour faire la résolution des problèmes efficace et pour communiquer d'une manière précise. Ce cours est conçu pour préparer les élèves pour l'étude en chimie au niveau universitaire et aidera aux élèves à développer les attitudes et habiletés nécessaires pour devenir décideur bien renseigné qui est au courant du rôle de la chimie dans la vie quotidienne. Les matières étudiées sont: la structure atomique, l'équilibre, les acides et les bases, l'électrochimie et les réactions en milieu aqueux.

Recommended prerequisites: Chemistry 11 and either Applied or Pre-Calculus Mathematics
Through participation in co-operative experiments and other classroom experiences, students will develop skills for the safe handling of materials, careful observation and measurement, effective problem solving and precise communication. This course is designed to prepare students for further study in chemistry at the university level and to develop the attitudes and abilities that enable students to become informed decision makers who are knowledgeable about the role of chemistry in the world around them. Topics covered in the course include: atomic structure, equilibrium, acids and bases, electrochemistry and aqueous reactions.

## FRENCH IMMERSIONCOURSES

## Physique 11 - PHYF3S

Cours préalable suggéré: Introduction aux mathématiques appliquées at pré-calcul 10

Ce cours va plaire 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.
Recommended prerequisite: Introduction to Applied \& Pre-Calculus Mathematics 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.


Physique 12 - PHYF4S
Cours préalable suggérés: Physique 11 et mathématiques appliquées ou pré-calcul
Dans ce cours, les élèves vont mettre le point sur l'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.
Recommended prerequisites: Physics 11 and either Applied or Pre-Calculus Mathematics

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.

## SPECIAL INTEREST COURSES

After selecting your compulsory courses, you may select from the following electives. Please check with a counsellor for assistance with timetabling.

## GRADE 9 OPTIONS

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 in the Regular Program curriculum is to teach 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.
From Grades 9 to 12 students can carry out acts of communication such as:

- describing main features of a person or thing
- talking about the past
- expressing a feeling or opinion
- giving advice
- making predictions
- justifying a viewpoint
- talking about the future

Themes explored:

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

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. This course is offered all year, every other day.

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 (early or late)


## SPECIAL INTEREST COURSES

## GRADE 9 OPTIONS

## 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.

## Visual Arts 9 (0.5 credit) - VAHB1S

This half credit art course focuses on developing students' artistic and creative process and imagination through explorations in a wide variety of art mediums. Students will be introduced to artists both local and international, in order to better interpret and communicate through Art. Skills are developed through sketchbook work, and lots of hands-on fun Art making. Students may not enroll in VIAR1S and VAHB1S.

## Visual Arts (1.0 credit) - Enriched - VIARIS

This course is offered as a full credit that runs through both semesters. First semester begins with an in-depth look at creative process behind a successful work of art. Exciting hands-on exploration of traditional art mediums, visual awareness and learning the framework behind successful art making round off the first half of the course. The second half of the program begins in semester 2. Students are now expected to continue developing their art skills and creativity while taking on more challenging projects. Students may not enroll in both VIAR1S and VAHB1S.

## Advanced Science 9 ( 0.5 credit) - ASHY1G

This half-credit laboratory based option course is a complement to science 10F. The course is designed to promote the development of practical skills and scientific reasoning. Students will gain experience in data acquisition and interpretation while learning concepts in the physical sciences. This course is open to any student who desires a new scientific challenge and is recommended for those students who plan to apply for the International Baccalaureate Program.

## SPECIAL INTEREST COURSES

## Advanced Science 9 ( 0.5 credit) - ASHY1G

This half-credit laboratory based option course is a complement to science 10 F . The course is designed to promote the development of practical skills and scientific reasoning. Students will gain experience in data acquisition and interpretation while learning concepts in the physical sciences. This course is open to any student who desires a new scientific challenge and is recommended for those students who plan to apply for the International Baccalaureate Programme.

## Clothing, Housing and Design 15G ( 0.5 credit) - CLHR1G

This course focuses on basic sewing skills, and using a commercial pattern. There are two assigned projects: a pair of shorts and a backpack. The backpack is customized with machine embroidery. The theory component will include basic construction skills and fabric care.

## 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 Flash 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.


## Dramatic Art 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. The goal of this introductory course is to increase student confidence, and to develop the skill of working as part of a team.

## Dance9 ( 0.5 credit) - DNHB1S

Dance is an expressive art form that provides a means to deepen, broaden, and enhance human experience. In this course we will explore various styles of movement, learn to use dance terminology, as well as develop an understanding of shape, space, line, formation, structure, balance, energy, and dimension. The end goal will be to acquire the skill set necessary to express oneself creatively through choreography.

# SPECIAL INTERES 

## Electronics 9 ( 0.5 credit) - ELHR1G

At this level, students will learn the basics of electronic parts and components and how they work by way of experimentation and project work. Basic electronic theory is presented using individualized computer assisted instruction and experimentation.

## Introduction to Foods 9 ( 0.5 credit) - FNHR1G

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 the Canada Food Guide.

## Family Studies 9 ( 0.5 credit) - FSHR1G

This is an activity-based study of the family with a particular focus on the world through the eyes of an adolescent. Students will have opportunities to practice decision-making, communication techniques, and group skills. They will also study issues of child care and development.

## Graphic Design 9 ( 0.5 credit) - GRHR1G

Students are introduced to all areas of design. Skills are developed in many areas such as screen printing, air brushing, design and layout, photography and typography. The course emphasis is on digital image creation, editing and software applications.

## 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, collections, and app design. Students will produce content with the focus on user experience. The course utilizes block code in a web-based IDE called Microsoft Touch Develop. Students will also communicate ideas and analyse information using a variety of tech based media through blogs and wikis.

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

The world is becoming more interactive. Content is being provided by the users themselves. This course will help students develop and understand that content. Topics include: designing and creating non-sequential web pages and branching multimedia presentations, designing and creating graphics for a variety of purposes and audiences, analysing whether information collected from media sources is sufficient and/or suitable for purpose and audience, discussing information, ideas, and electronic work using tools for electronic communication (e.g., email, electronic whiteboards, web pages, wikis, blogs, podcasts).

## Leadership Skills 9 -Level One ( 0.5 credit) - LEHY1G

An innovative course that provides an introduction to developing: leadership skills, more self-confidence, a more positive outlook, realistic ways to deal with difficult situations and skills for positive social change.
Students interested in this course should: like to try new things, have strong communication skills, like to learn by "doing", like to challenge their skills, have experience working in groups, and be ready to problem solve in group situations.
Skills learned in this course: can be used on teams, with friends, in a class, at a job; are fun; can help adjust to high school; can improve resume content and scholarship opportunities; are important in Level Two. Limited space is available for this course.

## SPECIAL INTEREST COURSES

## Music 1 Special Interest ( 0.5 credit) - MU1H1S

This music class looks at communication through music. We study how stories are told through music by looking at the language of music, musicals, the importance of lyrics, social issues expressed with music and the connection between music and emotion. We also work on developing musical literacy and vocal skills.

## Outdoor Education 9 ( 0.5 credit) - OEHY1G

The Outdoor Education course is for highly active students who enjoy being in the outdoors in a variety of climates! Grade 9 Outdoor Education is a half credit course that will allow students the opportunity to explore and participate in a variety of outdoor education experiences. Some of the topics covered in this course are: backpacking, canoeing, first aid, outdoor survival, conservation, environmental awareness and wildlife safety.

Students choosing this option should be prepared for a lot of physical activity in all types of weather, as well as overnight outdoor pursuits. Participation at the various out of school activities is compulsory as the course is set up as experiential. Out of school time will be required for this course, along with some additional fees to cover the various costs of the excursions.

## 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.

## SPECIAL INTEREST COURSES

## GRADE 10-12 OPTIONS

## ASIA PACIFIC STUDIES

All Asia Pacific Courses are optional.
In the third millennium, the Asia Pacific Rim will have $70 \%$ of the world's people and will produce $50 \%$ of the world's goods and services. Inspired by this demographic reality, Kelvin High School has developed the most comprehensive AsiaPacific Studies program found in Manitoba high schools. Students who successfully complete two or more credits in Asia-Pacific will be awarded the Certificate in Asia-Pacific Studies.


## Asia-Pacific Studies 10 - ASPY2G

(No prerequisites) Open to all Grade 10 and Grade 11 students.

This dynamic 1 credit course, offered after regular class hours once a week throughout both semesters (2 hours/week), will explore in some depth a variety of Asian cultures, including Japan, China, India and Pakistan. Emphasis will be on history, current issues, demographics, gender roles. The course will be activity based and will feature visits to centres of Asian faith (temples, mosques, etc.) as well as guest speakers, and student-led workshops. The course culminates in an extended role play in which students represent nation states and pressure groups at an in-school Asia Pacific Conference. Correspondence and travel are a possibility.

## Asia-Pacific Studies 11 - ASPY3G

(Prerequisite-ASPY2G) Open to all Grade 11 and Grade 12 students.

This course is a follow-up to the intermediate course leading to a certificate in Asia-Pacific Studies. Taught in weekly sessions throughout semesters 1 and 2, the course focuses on the political, cultural, and economic aspects of the Asia-Pacific region and provides extended research assignments. The first part of the course looks in detail at individual countries such as Afghanistan, Iran and the Philippines. Students will develop their skills in mentoring as a means of evaluation.

# SPECIAL INTERES <br> <br> SOCIAL SCIENCE ELECTIVES 

 <br> <br> SOCIAL SCIENCE ELECTIVES}

## Community Service 12- CSVZ4G

The Community Service/Volunteer credit recognizes the need for students to be aware that the workplace of the future will require highly skilled, creative individuals involved in lifelong learning. This gives students the opportunity to learn and to develop skills by exploring roles, observing and interacting with people in a safe and supervised volunteer setting.

## Current Topics in Aboriginal Studies 12 - ABSR4S

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 - ECOR4S

Economists find inspiration from the real world. This real world is about making choices regarding efficient use of society's scarce resources. Students will study the principles of economics and study the world in a rational and objective way. Students will be able to talk about economic issues with relative comfort, and will have a better idea about how the economy works.

## Geography 12 - GEOR4S

Prerequisite: Geography 10
Geography 40S deals with the inter-relationships of humans and their worldwide environment.
The topics covered in this course are: 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

Students conduct inquiry into the social, political, environmental, and economic impact of contemporary and emerging global issues.
Through their inquiry, students focus on questions of quality of life locally, nationally and globally. This course is based on the principles of active democratic citizenship, ecological literacy, critical media literacy, and ethical decision-making, and consolidates learning across the disciplines to empower students as agents of change for a sustainable and equitable future. As a mandatory component of the course, students plan and implement a community-based action-research project.

## History 10 - HISR2G

This course is designed to study themes in American History that have defined the American experience from the colonial period to the present day. The following topics will be studied: colonial period, American Revolution, Western migration, The Civil War, World Wars I and II, and the civil rights movement. Current events will also be studied as a part of this course.

## 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.

## SPECIAL INTERES

## 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

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.

## SPECIAL INTERES

## 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.
http://www.edu.gov.mb.ca/k12/cur/teched/index.html

## 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.NET 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, ObjectOriented Programming, Control Structures, Resource Management, and Databases. The programming language which will be used is Java in the NetBeans 8.1 IDE. Students will also be preparing for a large-scale software solution project.
Computer Science (IB) 11 - CSSB3S
Prerequisite: COSB2S and 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, ObjectOriented Programming, Control Structures, Resource Management, and Databases. The programming language which will be used is Java in the NetBeans 8.1 IDE. Students will also be preparing for a cross-subject collaborative group project as a part of the IB Diploma.

## SPECIAL INTEREST, COURSES

## 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 post-secondary 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 8.1 IDE. Students will also be completing a large-scale software application.


Computer Science (IB) 12 - CSSB4S
Prerequisite: Computer Science (IB) 32 S
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 8.3 IDE. Students will also be completing a large-scale software application and participate in the G4 crosssubject collaborative group project.

## Web Design 11 / Interactive Websites 11 - WDHR3S/IWHR3S

Open to students in Grades 11 and 12
Recommended: Computer Science 10
This course provides students with the skills and knowledge to design and develop websites that both convey and process information. Specific emphasis will be placed on aesthetics, standards compliance, logical structure, usability, and data handling. Interactive elements related to the Web will include JavaScript and Databases and how they relate to the Internet today. Due to the many programming-related concepts contained in this course, Computer Science 20S is suggested, but not required as a prerequisite.

# SPECIAL INTERES 

## BUSINESS EDUCATION

## Accounting Principles 11 - ACPR3S <br> Open to students in Grades 10, 11 or 12

This course is designed to help students develop the skills required to meet the challenges found in the changing world of finance. It provides an awareness of a wide variety of accounting and technology careers and lays the foundation for continued study and lifelong learning in accounting. Students will gain valuable information about managing personal finances and practices used in Business. Some Excel Spreadsheets will be used.

## Accounting Systems 12 - ACSR4S

Prerequisite: Accounting Principles 11 - ACPR3S
Accounting Systems is designed to help students develop the skills required to meet the challenges found in the world of accounting by building on principles and concepts introduced in Grade 11 Accounting Principles. Students are taught how to read and analyze financial statements to help businesses improve their profits. Computerized accounting software will be used extensively in this course. The University of Winnipeg accepts this as an option course for admission for entrance scholarships.
Career Development 11/12 (Two credits offered together, Slot D \& E) - LWBR3S \& LWTR4S
Open to students in Grades 11, 12
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, Slot D \& E (students take both together).


Futures in Business 9 /Start Your Own Business 10 - FUBR15G/SYBR25G Open to students in Grades 10, 11, 12

This course is designed for students who are interested in learning about an introduction to the world of business and the fundamental skills necessary to start and run their own business. Students will create resumes, conduct interviews, and define success for their future. In addition, students will develop a business plan and run their own business as their final project. Follow-up course: Business Communications

## Promotions 11 - PROR3S

Open to students in Grades 11 and 12
Students in this course focus on promotional activities such as advertising, developing market portfolios, etc. Topics include the product life cycle, distribution strategies, layout and design, public relations, and promotional activities. In the final project students become marketing managers for a school team or club and create a media campaign.
Follow-up course: Management

## SPECIAL INTEREST COURSES

## Retailing 10 - RETR2S

Open to students in Grades 11 and 12
No work experience? No references? No problem! Learn practical retail experience by operating and managing the school store, Kelvin Clipper Korner. This course runs at lunch time. This experience is great to add to a resume to help obtain jobs in the retailing or service sectors. Students will learn inventory management, how to use a cash register, balancing a float, etc.
Follow-up course: Promotions

## Desktop Publishing 10 - WOPR2S

Open to students in Grades 10, 11 and 12
This course is designed to teach students proper computer skills. Microsoft Office software is used extensively: Word, Excel, PowerPoint and Publisher. In addition, Social Media and Passport to the Internet is used, to provide students with improved skills to use in other courses and their future
Follow-up course: Start Your Own Business /
Futures in Business

Visions and Ventures in Entrepreneurship 11 - VIVR3S

Open to students in Grades 11 and 12
Learn how to transfer your ideas into profits. This course introduces students to the principles of business ownership and management. Concepts studies include market research, financing your dream, and setting up and managing a new business. Students will develop a business plan and actually operate a business of their choosing within the school.
Follow-up course: Seminar in Business

## Seminar in Business Grade 12 - SEBR4S

Open to students in Grades 11 and 12
Discussions will be based on factors affecting a successful business and current trends in business. Project management techniques and e-commerce will be explored. The final exam consists of developing an e-commerce business plan.

## THE TECHNOLOGY EDUCATION CERTIFICATE PROGRAM

Take any combination of the following courses with a minimum of 8 credit hours, to qualify for the Business Education Certificate.

| Courses Offered in 2016/17 | Grade | Department | Credit |
| :---: | :---: | :---: | :---: |
| ICTA1 | 9 | Computer Sciences | .5 |
| ICTA2 | 9 | Computer Sciences | .5 |
| Print Communications (gr9 graphics) | 9 | Industrial Arts | .5 |
| Futures in Business | 9 | Business Tec Ed | .5 |
| Start your own Business | 10 | Business Tec Ed | .5 |
| Desktop Publishing/ Business <br> Communications | 10 | Business Tec Ed | 1 |
| Interactive Websites | 11 | Computer Sciences | .5 |
| Web Design | 11 | Computer Sciences | .5 |
| Promotions | 11 | Business Tec Ed | 1 |
| Retailing (school store) | 11 | Business Tec Ed | 1 |
| Visions \& Ventures | 11 | Business Tec Ed | 1 |
| Accounting Principles | 11 | Business Tec Ed | 1 |
| Accounting Systems | 12 | Business Tec Ed | 1 |
| Economics | 12 | Social Studies | 1 |
| Law | 12 | Social Studies | 1 |
| Seminar in Business | 12 | Business Tec Ed | 1 |
|  |  | Total Credits Possible | 13 |

## SPECIAL INTEREST COURSES

## HOME ECONOMICS

All Home Economics courses are optional.

## Clothing, Housing and Design 10 - CHDR2G

This is a practical course focusing on basic sewing skills using a commercial pattern. Assigned projects include PJs, a beanie baby, pants, apron and sweatshirt. An embroidery machine is available for custom designs. Theory includes the elements and principles of design. A May trip to New York fashion district is an optional highlight.

## Clothing, Housing and Design 11 - CHDR3S

Grade 10 Clothing is not a requirement, you can opt for this course and learn at your own level, choosing projects which interest you. A May trip to New York fashion district is an optional highlight. By the end of the program, each student will be able to purchase suitable supplies, operate necessary equipment and follow written instructions well enough to sew independently with a commercial pattern.

## Clothing, Housing and Design 12 - CHDR4S

This is a university entrance credit course. All levels of sewing experience are welcome as you progress on an individual basis. Students choose their own commercial pattern for project week. A May trip to New York fashion district is an optional highlight.

## 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 - FASR2F

The grade ten level has early years focus. Development from prenatal to school age children will be taught. An important part of this course is the practical placement. Students who demonstrate reliable attendance will be placed in an elementary school classroom where they will interact with and observe children to complement the theoretical information. Students in this course will also partake in the "Baby Think it Over" Infant Simulation project.


## Family Studies 11 - FASR3S

The grade eleven course is an in-depth study of the psychology behind children, with an emphasis on elementary school age children and the modern adolescent. An important part of this course is the practicum within an elementary school or daycare.

## Family Studies 12 - FASR4S

The Grade 12 course is the study of the life cycle from adolescence, marriage and relationships, to death. The units of study are issues of the Canadian Family, Adolescents, Relationships, and Aging. An important component of this course is the practicum. Students will primarily focus on life plans.

## Food as a Part of Healthy Living 10 - FONR2G

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 - FONR3S

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.

## Living Independently 12 - FONR4S

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.

## 

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

Open to all Grade 10-12 students. (basic computer skills, ability to be self-directed) Students who have a keen 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 assignments. This course operates outside of regular school hours. Students must complete 110 hours to receive credit.

## Electronics 10 - ELER2G

In this course, students will become acquainted with circuits, tools and some electronic testing equipment. An introduction to Electronics, basic electronic theory with computer assisted instruction, as well as hands-on experiments are used to augment learning. Magnetism, induction, and basic semi-conductor theory is also studied at this level. A fairly large component of this course focuses on project building (small robot), and experimentation.

## Electronics 11 - ELER3G

An introduction to amplification, semi-conductors and digital electronics will be studied at this level. Project building and other hands-on experiments are also a large component of this course. Digital logic and small robots are discussed and introduced. Electronics 20G is recommended, but not a prerequisite.


## Electronics/Applied Technology 12 - ELER4S

Students will become acquainted with circuits, tools, integrated technology, and electronic testing equipment. Using digital IC chip and logic circuits, the students learn Boolean logic, \& digital electronics. Hands-on project building, robots, and experimentation is a continued focus of this course. Electronics 30G is recommended, but not a prerequisite.

## 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, raster (bitmap) editing, screen printing, vinyl cutting, air brushing, 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.

## SPECIAL INTERES <br> 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 Flash, Photoshop and Cinema 4D. Digital Design Level 2 is a hands-on, fun way to learn about digital media production.
*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 philosophy of digital graphic and new media design. 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.


## Drafting \& Design 11 - Level I - DRAR3G

This course is designed for students interested in drafting and 3D modeling. Career interests in Engineering, Interior Design, Industrial Design, Architecture, and building construction are an asset. Students will cover the basics of 2D and 3D sketching, 3D modeling, architectural design, and model building. Final projects will include a full residential 3D model, a physical model, and presentation design board.

## Drafting \& Design 12 - Level II - DRAR4S

This course builds on skills learned in Drafting \& Design Level I. A focus on residential building design and structural mechanics are the mainstay of the Level II course. The successful student will complete a full framing model of a residential building project. Students will also further their existing skills learned in the Level I course.

## SPECIAL INTEREST COURSES

## 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.


## 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 fast and efficient dovetail construction while building the project. Focus of the class will be on combining machine and handwork with classic construction techniques to produce the highest quality in the most efficient manner.

## Woodworking/Applied Technology 12 - WOOR4S

Explore the finer points of woodworking while designing and building an elegant project. This course will stretch the limit when it comes to furniture design. More focus will be placed on the use of and construction of jigs and templates as used in mass production and fine furniture making to create and produce the developed designs.

## Yearbook - Journalism and Production - DPHR2S/3S

Open to all Grade 10-12 students
This course is designed for students who have a keen interest in digital art, media art, and production. 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.

## SPECIAL INTEREST COURSES

## LANGUAGES

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

Grades 9 to 12:
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.
From Grades 9 to 12 students can carry out acts of communication such as:

- describing main features of a person or thing
- talking about the past
- expressing a feeling or opinion
- giving advice
- making predictions
- justifying a viewpoint
- talking about the future

Themes explored:

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



## French 10 - FRER2F

Prerequisite: French 9
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
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
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.

# SPECIAL INTEREST 

JAPANESE
Japanese Language 9 - 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.

## 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.

## Spanish 10 - SPAR2G

Prerequisite: Spanish 9 or equivalent
This course serves as a continuation from Spanish 9. The majority of the class is conducted in Spanish, enabling students to develop both comprehension and communication skills in the language. Students are encouraged to speak in Spanish as much as possible through class discussions, partner and group work, and presentations.


## Spanish 11/12 - SPAR3S/4S

Prerequisite: Spanish 10
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.

## Special Credit for Languages

Students may claim special credit for languages not included in the regular high school program. One credit for each language may be granted at each level. The Guidance department will set up testing sessions for students in languages such as Filipino, German, Hebrew, Italian, Latin, Polish, Portuguese, Ukrainian and First Nations languages. Courses are curriculum based and are designated as regular credits. Examples of languages for which special credit has also been given include Icelandic, Cree, Chinese, Saulteaux, Greek, Danish and Norwegian. A maximum of four special language credits may be counted towards graduation.

# SPECIAL INTERESTGOURS 

## VISUAL AND PERFORMING ARTS

## ART

## Arts 10/11/12 - VIAR2S/3S/4S

This course focuses on the development of creative artistic process through a wide variety of media including drawing, painting, sculpture, mixed media, as well as printmaking, photography, and the option of using New Media (video, animation, projection). There is a focus on art appreciation, visual awareness, and creative expression as the students develop risk taking and problem solving skills, while building their knowledge of art-making techniques.

No prerequisites are required at any level. Art skills are not necessary: this course is for anyone willing to release their creativity!
*This course is eligible for the Kelvin Visual Arts Certificate. See certificate information in this booklet for more information.

## Photography: VAPR3S

This course offers students the opportunity to experience the Art curriculum through the use of digital photography. Students learn the technical use of cameras as well as programs such as Photoshop and/or Lightroom, in order to develop images with creative and imaginative expression. Access to a digital camera is preferred but is not a requirement.
*This course is eligible for the Kelvin Visual Arts Certificate. See Kelvin Visual Arts pages in this booklet for more information.


## DRAMA

## 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. As such, performance and analysis of scripted works will comprise a significant portion of this course.

## Drama 11 - DAMR3S

Drama 10 (DAMR2S) or other experience recommended.

The 30S drama course is specifically designed to expose students to a greater range of theatre styles including realism, naturalism, absurdism, surrealism, Brecht, Greek, Commedia Dell'Arte, and Shakespeare, and to continue to introduce students to a diverse range of playwrights. Building on work done in DMAR2G, performance and analysis of scripted works will continue to comprise a significant portion of the course.

## Drama 12 - DAMR4S

Prerequisite Drama 10 (DAMR2S) or 11
(DAMR3S) or other experience recommended.
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 increasing longer scenes with more complex characters, and the year may culminate in the performance of a full length play. Practice auditions will also be scheduled to help prepare students for auditions and job interviews.

## SPECIAL INTEREST CO

MUSIC

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

The choir is made up of students from grades 9 to 12. This performance based group rehearses at 8:00 AM and over the lunch hour, and works towards concerts, festivals and a spring tour. 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.


## Concert Band 10 - MCBR2S

This course is designed for those students that wish to continue their studies in band. The focus will be on medium-difficulty repertoire of various styles. Band 10G is a prerequisite for this course.

## Concert Band 11/12 - MCBR3S/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.

## 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 21 st 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 the fall of 2009.


## REQUIREMENTS:

- Minimum 10 credits with a minimum average of $85 \%$
- Four courses at the Grade 9 level (2-3 credits), example: Band (1.0), Choral Music (1.0), Dance (0.5), Drama (0.5)
- Three courses at the Grade 10 level (3 credits), example: Choral Music (1.0), Drama (1.0), Jazz band (1.0)
- Three courses at the Grade 11 level (3 credits), example: IB Music (1.0), Drama (1.0), Theatre Production (1.0), Music and Industry (1.0)
- Three courses at the Grade 12 level (3 credits), example: Music (1.0), Drama (1.0), Choral Music (1.0)

Requirements are to be met over a 4 year period, but may be done over the course of three.
Private options (such as private music) 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. Students in the program will have access to field trips within Winnipeg, and curriculum based school trips to immerse and study art, architecture and media. 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.

| ART <br> (3 COURSES) | GRAPHICS/DRAFTING <br> (2 COURSES) | DIGITAL DESIGN <br> (2 COURSES) |
| :---: | :---: | :---: |
| VAHB1S/VIAR1S |  |  |
| VIAR2S | GRAR1G |  |
| VIAR3S | GRAR2G | CTHR1G |
| VIAR4S | DRAR3G | GRAR3G |
| VIAB3S | DRAR4S | GRAR4S |
| VIAB4S |  |  |
| VAPR3S |  |  |

Digital Media Production 10/11 - VA1R2S/VA1R3S (Special Interest Course) may be substituted for one of the above courses upon review.

## INTERNATIONAL BACCALAUREATE PROGRAMME (IB) <br> The IB programme is a comprehensive and rigorous program of studies that prepares students for examinations administered worldwide in May of their graduating year. 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 postsecondary education. Many universities grant first <br> 

 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. Students are encouraged to pursue the highest level of achievement within the programme, the IB Diploma. 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).

This 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 |
| Four | Sciences | Biology HL; Chemistry SL; Physics HL; <br> Computer Science HL or SL |
| Five | Mathematics | Mathematics SL |
| Six | The Arts | Music HL or SL; Visual Arts HL or SL |

# INTERNATIONAL BACCALAUREATE PROGRAMME (IB) 

| GRADE 10 YEAR | GRADE 11 YEAR | GRADE 12 YEAR |
| :---: | :---: | :---: |
| ENGB2F - ENGLISH 20F | ENGB3S - ENGLISH 32S <br> (STUDENTS WRITE GRADE <br> 12 PROVINCIAL EXAM) | ENGB4S - ENGLISH 42S |
| FRSB2F - FRENCH 20G <br> FREB2F - FRANÇAIS 20F | FRSB3S - FRENCH 32S <br> FRHB3S - FRANÇAIS 32S | FRSB4S - FRENCH 42S <br> FRHB4S - FRANÇAIS 42S |
| GEOB2F - GEOGRAPHY 20F | ECOB3S-ECONOMICS 32S | ECOB4S - ECONOMICS 42S |
| HISB3F - HISTORY 30S | HISB4S - HISTORY IB 40S | HIHB4S - HISTORY 42S |

## INTERNATIONAL B PROGRAMME (IB)

While IB is designed to be a two-year curriculum for the final two years of high school, most North American 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.

In most instances students decide between Higher Level (HL) and Standard Level (SL) courses in early fall of their Grade 12 year when they are registered for their IB final examination papers. IBO allows students to attempt an examination in one or two courses, Standard Level only, at the end of their Grade 11 year. This is called Anticipated status. Kelvin students are registered as Anticipated Candidates in Chemistry SL. They write the IB 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 set exams are awarded International Baccalaureate grades in July of their Grade 12 year after the IB examinations are assessed throughout the world.

# INTERNATIONAL B PROGRAMME (IB) 

## 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 the English 12 Provincial Standards Test in June of their Grade 11 year, as well as the Higher Level IB exams in May of their Grade 12 year.

## 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 middle years 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 abilities in the language.


The objectives of the Language B course, at both Higher and Standard levels, are language acquisition and intercultural awareness. The course has a core curriculum: Social Relationships, Communication and Media and Global Issues. The teachers will also choose two topics from the five following options: Health, Customs and traditions, Leisure, Cultural diversity, Science and technology. At Higher level only, students will study Francophone literature.
Students must be prepared, in their grade 12 year at both Standard and Higher levels, to write a paper in French and to do an oral exam. They will also sit the written comprehension and composition exams in May.

## INTERNATIONAL B PROGRAMME (IB)

## GROUP 2 - LANGUAGE ACQUISITION FRENCH

## 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 reading and writing 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
 S4 French Communication and Culture credit. In addition, students are expected to make a conscious effort to broaden their vocabulary 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.

## 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. 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. Emphasis is also placed on the literary essay and the commentary. Students prepare for an oral exam by making presentations in class.

# INTERNATIONAL B PROGRAMME (IB) 

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 11 - 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, CanadianAmerican relations, economic and social history, immigration, and foreign affairs.

## History IB - Europe - 12 - 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 not Euro-centered but 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.

## Economics IB 11/12 - ECOB3S/ECOB4S

Economics introduces the student to the basic tools of economic reasoning, offering an understanding of current problems while encouraging students to employ economic analysis in various situations. Course content includes: Economic thought, Microeconomics, Macroeconomics, International Trade, and Economic Development. The course is studied over two years and is deemed a sound introduction for university-bound students interested in Economics, Law, Commerce and Business Administration.

# INTERNATIONAL B PROGRAMME (IB) 

## 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 Biology and Grade 11 Chemistry. This science program is designed to give students a strong background in science and it is suitable preparation for the IB examinations and university study.

## Science IB 10 - SCIB2F

This course begins with an introduction to measurement in science. Science IB 20F introduces students to the study of real world phenomena through geometric optics, kinematics and dynamics, including Newton's Laws of Motion. Students will also begin an exploration of the topics of energy sources and climate change, thus contributing to an understanding of global environmental implications and the role of science and technology in society.

## 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 medicines and drugs, spectroscopy, and environmental chemistry. Chemistry is an experimental science and therefore a strong emphasis is placed on practical work and the development of laboratory skills. This course prepares students to write the Chemistry Standard Level IB exam in May of their Grade 11 year.

# INTERNATIONAL B PROGRAMME (IB) 

## GROUP 4 - SCIENCES

## 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 and general relativity. Students will continue their study of environmentally relevant topics like future energy sources and socially relevant topics like digital technology. 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 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 10 - COSB2S

Open to all students
This is a practical course in computer programming. Students will learn 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.NET in the Visual Studio IDE.


## 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, ObjectOriented Programming, Control Structures, Resource Management, and Databases. The programming language which will be used is Java in the NetBeans 7.3 IDE. Students will also be preparing for a cross-subject collaborative group project as a part of the IB Diploma.

## 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 7.3 IDE. Students will also be completing a large-scale software application and participate in the G4 crosssubject collaborative group project.

## INTERNATIONAL BACCALAUREATE PROGRAMME (IB)

## 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 the use of technology, 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. 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 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. Students write the Math 12 Provincial Standards Test in June of their Grade 11 year.


## Mathematics IB 12 - MASB4S

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

## INTERNATIONAL B PROGRAMME (IB)

GROUP 6 - THE ARTS
Music IB 11/12 - MUSB3S/4S
**A minimum of ten students required to offer this course**
Open to all students
This is a music program for students with a strong background and interest in music. The components of the course include history of western music, study of non-western music, musical literacy, performance, theory and music analysis.

## 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. The purpose of this course is to stimulate critical reflection upon students' knowledge and experience both in and outside the classroom. Students examine what they and others know through analyzing concepts, arguments and value judgments.
Assessment is a class presentation in Grade 11 and a final paper sent to IB for assessment in Grade 12.

## Extended Essay (non-credit) - EXEY4G

Independent research and writing an essay in a subject area chosen by the student.

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## KELVIN HIGH SCHOOLLIBRARYMITM

Hours: Monday to Friday, 8:30 am to 4:00 pm
The Library is closed during the Winter Holiday Break, Spring Break, and the months of July and August.

## 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, magazines, newspapers, reference materials, as well as network and Internet-delivered information products. A network of library-based computer search stations provides access to all books and audio-visual media in the Library, and direct access to Internet resources, including the comprehensive on-line magazine database, EBSCOhost.

EBSCOhost is also 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:
https://www.winnipegsd.ca/schools/Kelvin/ StudentResources/khslibrary/Pages/default.aspx.

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 perusal, on site only.

## Who staffs Kelvin Library?

Kelvin High School Library is staffed by a professional teacher-librarian and a 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 short- and long-term work on a variety of information literacy activities. Kelvin's Library also contains an extensive fiction collection -primarily paperback -- supporting both leisure reading and curricular linkages. Additionally, students may use the Library for searching and retrieving materials for assignments, quiet study, and leisure reading.


Do students need a library card to borrow items?
YES - In September of each academic year, along with school photos, students receive a picture ID card (the Winnipeg Transit "GO" card). Kelvin students must present the "GO" card in order to borrow Library materials.

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

Up to 3 items may be borrowed, and renewed, if needed. Items are due in two weeks and may be renewed, if needed longer and no other requests have been placed for 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.


ÉCOLE SECONDAIRE
KELVIN HIGH SCHOOL
155 KINGSWAY
WINNIPEG, MANITOBA R3M 0G3
(204) 474-1492
www.winnipegsd.ca/schools/kelvin


[^0]:    CAS - Creativity Activity Service (non-credit) - CSHB4G

    Volunteer component outside of the classroom/ academics.

