



**2022-23**  
**Handbook**

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## The Senior Years

The senior years provides a varied curriculum to meet the needs, interests, and abilities of students. The program provides a sound basis for further education or immediate employment.

This booklet has been designed to answer some of the questions that arise as students make the transition to the senior years of secondary education

## Structure

The Manitoba Education high school structure includes Grades 9, 10, 11 and 12.

## Semester system

Most senior year's courses are taught on a semester system. The course runs from September to the end of January or from February to the end of June. Each student is timetabled individually depending on the courses selected.

## Credit system

The credit system provides a framework enabling students to pursue programs best suited to their individual needs and aspirations. A student may earn one credit by successfully completing a course of study. Half credits may be earned in a similar manner.

## Attendance policy

Students are expected to log into their courses daily. Most course require one to two hours of work per day. The granting of course credits on a per subject basis is conditional on meeting school attendance requirements.

## Graduation Requirements

Students are required to accumulate a minimum of 30 credits to graduate with a Manitoba Provincial Diploma.

## Registration

Registration forms are online at [www.informnet.mb.ca](http://www.informnet.mb.ca)

## General Information

Consider your selected courses carefully. In many instances it will be impossible to make alternate choices later. Selections made during the spring registration period will determine the courses offered for the next school year. Timetable changes will be considered based on individual needs.

## Course Selection

The Senior Level course numbering system is made up of a minimum five-character, alphanumeric code. The first and second characters are letters, the third and fourth are numbers and the remaining characters are letters.

### First Two Characters

These first two characters are each letter, which are used as a course description. For instance:

Math:	MA	History:	HI	Physical education:	PE
English:	EN	Social studies:	SS		
Science:	SC	Geography:	GE		

### Third Character

- 1 - courses developed for grade 9.
- 2 - courses developed for grade 10.
- 3 - courses developed for grade 11.
- 4 - courses developed for grade 12.

### Fourth Character

- 0 - courses developed or approved by the province for 1 credit.
- 5 - courses developed or approved by the province for 1/2 credit.
- 1 - courses developed by a school or division and approved or registered by the province
- 2 - courses developed elsewhere and approved or registered by the province (e. g.: university, out of province, and out-of-country).

### Fifth Character

Courses in each subject are identified as foundation, general, specialized, advanced, modified, individualized, English as an Additional Language or French immersion.

F - Foundation: educational experiences, which are broadly based and compulsory for all students. The following courses have been designated as Foundation Courses: EN10F, SC10F, MA10F, PE10F, SS10F, EN20F, GE20F, PE20F, SC20F and HI30F.

G - General: general education experiences for all students.

S - Specialized: educational experiences in specialized areas leading to further studies beyond high school.

## InformNet - online learning

InformNet has blended and synchronous learning options. Primarily blended, but teachers use the zoom meetings for learning when best suited. Online learning through InformNet provides students with daily instruction, assignments and evaluation through regular email and web-based interaction from a certified high school teacher. The student's home school provides the course credit when subject requirements are met.

Students choose a learning option:

### Students choose a learning option:

**Blended Learning Option:** This student-directed option is our most popular option and offers students the most control in their learning. Students work through Brightspace learning modules, submit the module assignments, and finally complete the specified online tests. All work is marked within 24 hours by the course teacher. If students need concept clarification, they contact the course teacher through Classlist emails. Full time InformNet teachers offer virtual classroom (synchronous learning) options in Brightspace to focus students before assessments, for remedial instruction, to supplement content, direct problem solving, individual meetings, parent-teacher conferences and finally to build community. These virtual meetings are recorded and sometimes embedded back into the course when applicable. The blended model offers students more options as they still attend their day school and take InformNet classes on top of their regular course schedule. It allows student to catch up on missed credits and work ahead.

**Synchronous Learning Option:** These courses are only available to students who are NOT in a day school. (Not available in summer session.) Students will receive daily teacher lead - whole class instruction at a specified time. Supplementary and support content is given through Brightspace learning modules. Course assignments and tests will be given with specific due dates required. Grade 9 and 10 level - required courses for graduation only. **Students need to ensure they use their computer microphone and camera while in synchronous classes.**

Grade 9 and 10 Synchronous Timetable (Monday to Thursday)		
9:00 a.m.	Math Intro to Applied & Pre-Calculus 20S	Phys-Ed 10F (Tues/Thurs) Phys-Ed 20F (Mon/Wed)
10:00 a.m.	Math 10F	English Language Arts 20F
11:00 a.m.	Canada in the Contemporary World 10F	Science 20F
12:00 p.m.	Lunch	Lunch
1:00 p.m.	Science 10F	Math Essential 20S
2:00 p.m.	English Language Arts 10F	Geographic Issues of the 20th Century 20F

Online learning is not for everyone. It is an opportunity given to students who cannot get into a course offered at their school, need a credit required for graduation or would like to try a course not offered at their home school. The guidance counselor and school administration have the right to limit access to online courses if there are relevant academic issues associated with the student that would hinder progress in an online environment. InformNet also provides these opportunities to Independent, homeschooling, and adult learners.

Please visit the InformNet website ([www.informnet.mb.ca](http://www.informnet.mb.ca)) for updated information.

InformNet Course Listing for 2022-23: visit: <https://www.informnet.mb.ca/courses.html>

Semester 1 Courses (Sept. 19 – Jan. 30)	Semester 2 Courses (February 6 – June 10)
<ul style="list-style-type: none"> <li>• Math 10F</li> <li>• Science 10F</li> <li>• Canada in the Contemporary World 10F</li> <li>• Physical Education 10F</li> <li>• English Language Arts 10F</li> <li>• Visual Art 10S</li> <li>• English Language Arts 20F</li> <li>• Life/Work Planning 20S/25S</li> <li>• Math Essential 20S</li> <li>• Math: Intro to Applied and Pre-Cal 20S</li> <li>• Geography 20F</li> <li>• Science 20F</li> <li>• Physical Education 20F</li> <li>• Computer Science 20S</li> <li>• Digital Pictures 25S (1/2 credit)</li> <li>• Canadian History 30F</li> <li>• Chemistry 30S</li> <li>• Biology 30S</li> <li>• Physics 30S</li> <li>• ELA Comprehensive Focus 30S</li> <li>• ELA Literary Focus 30S</li> <li>• Physical Education 30F</li> <li>• Math Applied 30S</li> <li>• Math Pre-Calculus 30S</li> <li>• Math Essential 30S</li> <li>• Computer Science 30S</li> <li>• 2D Animation 35S (1/2 Credit)</li> <li>• Math Essential 40S</li> <li>• ELA Comprehensive Focus 40S</li> <li>• ELA Literary Focus 40S</li> <li>• Chemistry 40S</li> <li>• Biology 40S</li> <li>• Physics 40S</li> <li>• Math Pre-Calculus 40S</li> <li>• Math Applied 40S</li> <li>• Math: Introduction to Calculus 45S</li> <li>• Psychology 40S</li> <li>• Physical Education 40F</li> <li>• Family Studies 40S</li> <li>• Canadian Law 40S</li> </ul>	<ul style="list-style-type: none"> <li>• Math 10F</li> <li>• Science 10F</li> <li>• Canada in the Contemporary World 10F</li> <li>• Physical Education 10F</li> <li>• English Language Arts 10F</li> <li>• Visual Art 10S</li> <li>• English Language Arts 20F</li> <li>• Math: Intro to Applied and Pre-Cal 20S</li> <li>• Math Essential 20S</li> <li>• Physical Education 20F</li> <li>• Computer Science 20S</li> <li>• Life/Work Planning 20S/25S</li> <li>• Geography 20F</li> <li>• Science 20F</li> <li>• Digital Pictures 25S (1/2 Credit)</li> <li>• Canadian History 30F</li> <li>• Chemistry 30S</li> <li>• Biology 30S</li> <li>• Physics 30S</li> <li>• ELA Transactional Focus 30S</li> <li>• ELA Comprehensive Focus 30S</li> <li>• ELA Literary Focus 30S</li> <li>• Math Applied 30S</li> <li>• Math Pre-Calculus 30S</li> <li>• Math Essential 30S</li> <li>• Computer Science 30S</li> <li>• Physical Education 30F</li> <li>• 2D Animation 35S (1/2 Credit)</li> <li>• Chemistry 40S</li> <li>• Biology 40S</li> <li>• Physics 40S</li> <li>• ELA Transactional Focus 40S</li> <li>• ELA Literary Focus 40S</li> <li>• ELA Comprehensive Focus 40S</li> <li>• Canadian Law 40S</li> <li>• Math Pre-Calculus 40S</li> <li>• Math Applied 40S</li> <li>• Math Essential 40S</li> <li>• Physical Education 40F</li> <li>• Global Issues 40S</li> <li>• Psychology 40S</li> <li>• Family Studies 40S</li> <li>• Math: Introduction to Calculus 45S</li> <li>• Current Topics in First Nations, Métis and Inuit Studies 40S</li> <li>• Computer Science 40S</li> </ul>
<p><b>French Immersion: (Limited Seats)</b></p> <ul style="list-style-type: none"> <li>• Géographie 20F</li> <li>• Sciences de la nature 20S</li> <li>• Mathématiques au quotidien 20S</li> <li>• Mathématiques - introduction aux mathématiques appliquées et pré-calcul 20S</li> <li>• Mathématiques au quotidien 30S</li> <li>• Mathématiques au quotidien 40S</li> <li>• Mathématiques - pré-calcul 30S</li> <li>• Mathématiques - pré-calcul 40S</li> <li>• Physiques 30S</li> <li>• Physiques 40S</li> <li>• Éducation physique et Éducation à la santé 30F</li> <li>• Éducation physique et Éducation à la santé 40F</li> <li>• Histoire 30F</li> <li>• Enjeux mondiaux : citoyenneté et durabilité 40S</li> <li>• Premières Nations, Métis et Inuits : sujets d'actualité 40S</li> <li>• Études de la famille 40S</li> </ul>	<p><b>French Immersion: (Limited Seats)</b></p> <ul style="list-style-type: none"> <li>• Éducation physique et Éducation à la santé 30F</li> <li>• Éducation physique et Éducation à la santé 40F</li> <li>• Mathématiques au quotidien 20S</li> <li>• Mathématiques - introduction aux mathématiques appliquées et pré-calcul 20S</li> <li>• Mathématiques au quotidien 30S</li> <li>• Mathématiques au quotidien 40S</li> <li>• Mathématiques - pré-calcul 30S</li> <li>• Mathématiques - pré-calcul 40S</li> <li>• Histoire 30F</li> <li>• Français 30S</li> <li>• Français 40S</li> <li>• Le cinéma, témoin de l'histoire moderne 40S</li> <li>• Enjeux mondiaux : citoyenneté et durabilité 40S</li> <li>• Premières Nations, Métis et Inuits : sujets d'actualité 40S</li> <li>• Études de la famille 40S</li> </ul>

## How much does it cost?

Currently the cost for an InformNet course is **\$350.00**. Billed through PayPal. You do not need a PayPal account; this just helps for credit card payments.

## Attendance Policy

Notification sent out when a student has not logged in or completed any work for 10 days. A removal notification will be emailed if you have not logged in or completed any work for 20 days. Removal from the course if you have not logged in or completed any work for 30 consecutive days.

\*\* Any students taking a 40S web-based course with InformNet will write an online exam. \*\*

## Academic Honesty Policy

Academic integrity is a concept used to address the many aspects of validity within a student's work. A student who maintains a high standard of academic integrity maintains that the work he or she turns in is authentic to the knowledge he or she has acquired.



### Academic Integrity means a student...

- Will not allow others to copy work.
- Will complete each assignment independently.
- Will not misuse content from the Internet.
- Will not practice *plagiarism* in any form.

### Plagiarism

Plagiarism occurs when a student presents another person's work as the student's own and is not acceptable at InformNet. Commercial search engines are often very good at detecting work copied from material available online. Teachers have access to software which detects plagiarism and can often spot when writing does not come from the student.

### Student Responsibility

- InformNet is committed to ensuring the integrity and validity of student achievement within its courses by promoting academic honesty. Students are responsible for upholding integrity and will be held accountable for the quality of their work and actions. To this end, and in accordance with the Provincial Assessment Policy Kindergarten to Grade 12: Academic Responsibility, Honesty, and Promotion/Retention (Manitoba Education, 2010), InformNet expects that all students will demonstrate integrity, ethical conduct and academic honesty in all assessments, research, class work and homework assignments.
- InformNet takes preventative measures to reduce the incidence of academic dishonesty among its students. InformNet may review any work or email submitted by a student to determine its authenticity and legitimacy.

### Academic Dishonesty

Academic dishonesty will not be tolerated. Students who violate the academic integrity of InformNet will be subject to discipline in accordance with this policy. Academic dishonesty consists of any deliberate attempt to falsify, fabricate or otherwise tamper with data information, records, or any other material that is relevant to the student's participation within any course.

Academic offenses include, but are not limited to:

- Distributing or receiving answers other than those permitted by the teacher as part of any assignment, test or the final examination;
- Cheating or other forms of academic dishonesty intended to gain unfair academic advantage;
- Submitting academic work for assessment that was acquired from another source;
- Assuming another individual's identity or allowing another person to do so for the purpose of fulfilling any academic requirement;
- Copying answers, or other information (or allowing others to do so) during any assignment, quiz or the final examination;
- Allowing another individual to access course content, a quiz, unit test or final exam at any time while the student is completing an assessment;
- Using any device during the final examination without permission.

The Administrator and teachers of InformNet are responsible for ensuring that expectations for academic honesty are communicated and reinforced frequently and consistently with all students. Teachers, in consultation with the InformNet Administrator, will determine whether a breach of academic honesty has occurred.

#### **Procedure when dealing with Academic Dishonesty**

In situations where it has been determined that the student has engaged in dishonest behaviour the InformNet Administrator and/or subject teacher will:

- Ensure the student's home school administration is aware of the infraction. The home-school will notify the student's parent/guardian that an infraction has taken place.
- Document the incident.

#### **Possible Consequences for Academic Dishonesty**

The InformNet Administrator and/or home school administrator may determine an additional consequence be implemented. These consequences will reflect a continuum of behavioural and academic responses based on at least the following four factors: (1) the grade level of the student, (2) the maturity of the student, (3) the number and frequency of incidents, and (4) the individual circumstances of the student.

- A mark of zero for the assignment may be given for academic dishonesty
- Removal from the online course
- Removal from contention for school-based academic awards



## **ENGLISH LANGUAGE ARTS**

### **FOUNDATION COURSES - Grade 9 AND 10**

This is an integrated, theme-based course designed to provide students with a solid foundation of literacy skills, knowledge, and learning strategies. The course emphasizes reading comprehension, personal and critical response, and interpretation of a variety of text forms. Students also learn to collect, organize, and synthesize information through research and inquiry processes.

#### **ENGLISH - EN10F (Compulsory Course)**

In the 10F course, students express their ideas using the six English language arts of reading, writing, listening, speaking, viewing, and representing. Emphasis is placed on written communication, including exploration, examination, and analysis of the structure of sentences, paragraphs, essays, and longer fiction and non-fiction text. English 10F occurs every day for both semesters.

#### **ENGLISH - EN20F (Compulsory Course)**

This is the second of the two foundation courses and completes the literacy skills, knowledge, and learning strategies begun in English 10F. The course continues to emphasize reading comprehension, personal and critical response, and interpretation of various text forms; text forms include short prose, poetry, novels, and Shakespearean plays. Students continue learning to collect, organize, and synthesize information through research and inquiry processes. Written communication skills continue to be a focus in EN20F. Students create various texts to demonstrate their ability to address a specific audience, for a specific context and purpose.

### **FOCUS COURSES - Grade 11 AND 12 (Compulsory Course)**

In grade 11 and 12, students choose one of three English curricula focus courses to meet graduation requirements. These courses include the Literary Focus, the Transactional Focus, and the Comprehensive Focus. Unlike English language arts courses in the grades before Grade 11, Grades 11 and 12 courses offer different specializations based on the purposes for reading, writing, listening to, speaking, viewing, and representing texts. The Comprehensive Focus course covers a variety of purposes and provides an equal amount of time on working with texts for pragmatic (50%) and aesthetic (50%) purposes. The Transactional Focus course gives more weight to experiencing texts for pragmatic (70%) rather than aesthetic (30%) purposes. The Literary Focus course places more emphasis on working with texts for aesthetic (70%) rather than pragmatic (30%) purposes. Each of these courses is different from but equivalent to the others, and you can complete any or all three for credit.

#### **What are aesthetic and pragmatic purposes?**

Aesthetic is defined as a principle of taste (beauty) or style adopted by a particular person, group, or culture. Aesthetic works include poetry, plays, novels and short stories. For example, a student will read and analyze works of literature in terms of literary elements such as symbols, metaphors, similes, or irony and explain how these are important in a literary piece.

Pragmatic is defined as of or relating to a practical point of view or practical considerations. Pragmatic writing includes resumes, letters, speeches, and research essays. For example, students will learn how to write a cover letter and a proper resume.

#### **Note:**

Each course will require the study of aesthetic and pragmatic pieces and purposes, but the focus of each is different.

All three focuses satisfy university entrance requirements.

### **ENGLISH COMPREHENSIVE FOCUS - EN30SC**

This course addresses the learning outcomes identified by the provincial curriculum for the grade 11 Comprehensive Focus. Students read and respond to a balance of pragmatic and aesthetic texts. For example, transactional or non-fiction texts are used for practical, every-day purposes, while literary texts are used for aesthetic, expressive, and creative purposes.

### **ENGLISH LITERARY FOCUS - EN30SL**

The Grade 11 Literary course provides students with the opportunity to explore novels, plays, short stories and poetry. The course examines how writers use techniques or devices in their works, and more importantly, the effects these techniques have on the reader.

### **ENGLISH TRANSACTIONAL FOCUS - EN30ST**

The grade 11 transactional provides students with the opportunity to create and reflect upon personal goals and begin examining career choices. They also can create connections and explore the inquiry process through research. All these skills are explored using a variety of materials that include novels, poetry and non-fiction texts.

### **ENGLISH COMPREHENSIVE FOCUS - EN40SC**

This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Comprehensive Focus. Students read and respond to a balance of pragmatic and aesthetic texts at a more advanced level than the grade 11 course.

### **ENGLISH LITERARY FOCUS - EN40SL**

This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Literary Focus. Students read and respond primarily to literary or aesthetic text forms - including poetry, short prose, Shakespearean plays, and novels - at a more complex and deeper level than at the grade 11 level.

### **ENGLISH TRANSACTIONAL FOCUS - EN40ST**

This course addresses the learning outcomes identified by the provincial curriculum for the grade 12 Transactional Focus. Students read and respond primarily to transactional, pragmatic, or functional texts at a more advanced level than at the grade 11 level.

### **ENGLISH LANGUAGE AND LITERARY FORMS - EN40SLF**

This course provides for an in-depth examination and study of language forms, various genres in literature with a specific emphasis on the cultural mosaic contained in literature. Critical analysis of such literary forms as the short story, novel, poetry, and drama are undertaken with the express purpose of determining what makes each literature type unique. For instance, what makes a novel what it is and/or what devices of language might an author use in the composition of the novel?

### **ENGLISH LANGUAGE AND TRANSACTIONAL FORMS - EN40STF**

In some respects, this course builds on the compulsory, transactional course (EN40ST) by focusing on several distinct transactional forms, namely those most frequently associated with the world of business (e.g. business letter, report, interview), education (e.g. essay forms, analysis and synthesis), research (e.g. data collection and interpretation), journalism (e.g. the five W's), consumerism and the media (e.g. advertising, propaganda) and social interaction (e.g. legalese, cultural diversity).

# MATHEMATICS

## Grade 9

### **MATHEMATICS FOUNDATIONS - MA10F (Compulsory Course)**

This course provides the foundation for the various mathematics courses at the grade 10 level. The course includes, but is not limited to, statistics, probability, measurement, algebra, geometry, and problem solving.

## Grade 10 (Compulsory Course)

### **MATHEMATICS ESSENTIAL - MA20SS**

Grade 10 Mathematics Essential is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Mathematics Essential topics emphasize consumer applications, problem solving, decision-making, and spatial sense. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in everyday life in a technological society.

### **MATHEMATICS INTRODUCTION TO APPLIED AND PRE-CALCULUS - MA20SPA**

The grade 10 introduction to Applied and Pre-Calculus is intended for students considering post-secondary studies that require a math pre-requisite. The topics studied form the foundation for topics to be studied in both grade 11 Applied and Pre-Calculus Mathematics. 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.

## Grade 11 (Compulsory Course)

### **MATHEMATICS APPLIED - MA30SA**

This is one of two math programs available for students planning to pursue post-secondary studies in mathematics and science. It is intended for students whose post-secondary studies do not require the study of theoretical calculus. The math studied promotes the learning of problem-solving skills, number skills and geometry skills as they relate to the world around us. Topics include:

Quadratic functions	Systems of inequalities
Proofs	Trigonometry
Statistics	

### **MATHEMATICS ESSENTIAL - MA30SS**

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science related fields. This is a one credit course comprising two half credits, each emphasizing consumer applications, problem-solving and decision making, as well as number sense and spatial sense.

Students are expected to work both individually and in small groups on mathematical concepts and skills encountered and used in a technological society.

Topics include:

Interest and credit	Managing money
3D geometry	Relations and patterns
Statistics	Trigonometry
Design modeling	

## **MATHEMATICS PRE-CALCULUS - MA30SP**

This course is designed for students who intend to study calculus and related mathematics as part of a post-secondary education. The course comprises, primarily, a high-level of theoretical mathematics with an emphasis on problem solving and mental mathematics, supported by cumulative exercises and testing.

Students are required to learn mathematical concepts through practice and regular homework. Many of the questions and problems on exercises, tests and examinations can be expected to be different from those presented in class.

Topics include:

Quadratic equations and functions	Radicals and rational equations and expressions
Algebra	Sequences and series
Inequalities	Trigonometry
Relations and functions	

### Grade 12 (Compulsory Course)

## **MATHEMATICS APPLIED - MA40SA**

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.

## **MATHEMATICS ESSENTIAL - MA40SS**

This course is intended for student whose post-secondary planning does not include a focus on mathematics and science-related fields. Grade 12 essential Mathematics (40S) is a one-credit course consisting of two half-credits each emphasizing consumer applications, problem solving, decision-making, and spatial sense.

## **MATHEMATICS PRE-CALCULUS - MA40SP**

This course is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It builds on the topics studied in Grade 11 Pre-calculus Mathematics and provides background knowledge and skills for the study of calculus in post-secondary institutions.

### **Note:**

More than one mathematics course may be taken at each grade level for more than 1 credit. (For example, a student may take both MA20SS and MA20SPA (for a total of 2 credits).

Calculus 45S may be taken provided students have registered for/or completed MA40SP.

## **COMPUTER SCIENCE 20S - CS20S**

Students learn the fundamentals of programming through the Python programming language in CODEHS and gain essential tools and knowledge for computer science 30S and 40S. Areas studied include selection, looping and may include some basic graphics. Students also engage in debates, discussions and projects revolving around prominent topics in computing such as Internet ethics and problem solving.

## **COMPUTER SCIENCE 30S - CS30S**

Students continue programming in the Python programming language in CODEHS while learning more fundamentals in computer science such as arrays and different sorting algorithms. Students will learn to finesse their code and deal with more complex problems and situations. Students will continue to engage in various discussions and projects dealing with topics in computing.

## **COMPUTER SCIENCE - CS40S**

Students learn the current programming paradigm in practice to add to their growing knowledge of computer science in CODEHS. Students will be responsible for different independent projects which may include learning a different language or focusing on higher-level topics and programs in the Python programming language. Students will take part in discussions and projects dealing with topics in computing, such as careers in computing and current technologies.

## **SCIENCE**

### **SCIENCE FOUNDATION - SC10F (Compulsory Course)**

SC10F is divided into four major units: Reproduction, Atoms and Elements, Nature of Electricity, and Exploring the Universe. The Reproduction unit involves the study of human reproduction and genetics. Atoms and Elements is an introduction to the basics of chemistry. The Nature of Electricity unit has students investigating static and current electricity. Exploring the Universe leads students through an exploration of the universe and the study of space science and technology.

### **SCIENCE FOUNDATION - SC20F (Compulsory Course)**

The SC20F program is composed of four major units: Dynamics of Ecosystems, Chemistry in Action, In Motion, and Weather Dynamics. Dynamics of Ecosystems has students examining ecosystem relationships, population dynamics, biodiversity and how human activities affect ecosystems. The Chemistry in Action unit is a continuation from SC10F's Atoms and Elements. Students will study chemical reactions, nomenclature basics, principles of acid-base chemistry, and the effects of chemical use in the environment. Basic kinematics along with the concepts of inertia, force, impulse and momentum are looked at during the In-Motion unit. The complex relationships that influence weather and climate are pursued in the Weather Dynamics unit including the impact of human activities on our global climate.

### **BIOLOGY - BI30S**

Students in BI30S will study the Human Body with respect to homeostasis, digestion and nutrition, the respiratory system, excretion, and waste management, and concluding with the immune and nervous system. Students will also look at how technology has affected the wellness of the human body and resulting social issues.

### **CHEMISTRY - CH30S**

Using the kinetic molecular theory, students will look at physical properties of matter, including phase changes and vaporization. Students will also be studying physical characteristics of gases, gas laws, chemical reactions, stoichiometry, solutions and their physical characteristics, and organic chemistry including IUPAC nomenclature. Included in their studies will be a look at how chemistry has affected our quality of life.

### **PHYSICS - PH30S**

The PH30S course is divided into four major areas: Waves, Nature of Light, Mechanics and Fields. Some of the concepts studied in waves are the physical characteristics of waves, superposition of waves and wave interference. The concept of waves continues into the Nature of Light where light is looked at in terms of its wave characteristics and particle characteristics. Carrying on from the SC20F program, students will continue the study of kinematics during the Mechanics unit. To complete and overview of basic physics, students will address the concept of fields with respect to gravitational, magnetic, electric, and electromagnetic fields. Included in their studies will be a look at how the relationship between physics and science and technology has influenced our quality of life.

### **BIOLOGY - BI40S**

In this course, students are exposed to foundation concepts regarding the Biology of the world around us. The interdependence of life is a recurring theme in the course work. Students are expected to integrate information gained in previous units and apply that information throughout the semester. Topics of study include Ecology, Biological Diversity and Genetics. Specific emphasis will be placed on the use of Biotechnology including genetically modified food, forensics,

recombinant DNA technology, Human Genome Project, and Gene Therapy.

### **CHEMISTRY - CH40S**

Chemistry 40S students in this very comprehensive course will study five units consisting of Kinetics, Chemical Equilibrium, Acid-Base Equilibrium, Solubility Equilibrium and Oxidation-Reduction. Within these units, concepts such as factors affecting reaction rates, Le Chatelier's Principle, pH, buffers, and electrochemical cells are a few that will be addressed. Throughout the program, students will gain an understanding of observation and inference in this experimental science.

### **PHYSICS 40S - PH40S**

Students in this very comprehensive course will study four units consisting of Mechanics, Fields, Electricity, and Medical Physics. Students will have been exposed to the elementary concepts of these units in PH30S and apply them to such new concepts as projectile motion, circular motion, work and energy, low Earth orbits, electric circuits, and radiation. Throughout the program, students will gain an understanding of how science, technology and the environment are related in a physical sense.

## **SOCIAL STUDIES**

### **CANADA IN THE CONTEMPORARY WORLD - SS10F (Compulsory Course)**

In this course we will learn about how our government works, how people immigrate to Canada and become citizens and what makes us unique as Canadians. In addition, we will examine some basic Canadian geography as well as global issues such as poverty, working conditions in the developing world, war, and environmental challenges. In our examination of each issue, we will discuss how we as Canadians can actively respond to these issues.

### **GEOGRAPHY - GE20F (Compulsory Course)**

The focus of this course is the environmental and political issues in geography that impact our lives and those of future generations within the context of North America. Major topics of discussion will include: the impact of energy use on our planet; sustainable development; issues related to trade and industry; food production and related issues; population growth and city planning; use of Global Positioning Systems and Geographic Information Systems.

### **HISTORY OF CANADA - HI30F (Compulsory Course)**

This course engages students in historical inquiry and asking essential questions to focus on Canada from pre-contact times until the present. Canadian History emphasizes important skills and concepts in historical thinking and focuses on five major themes: First Nations, Métis and Inuit Peoples, French-English Duality, Identity, Diversity and Citizenship, Governance and Economics, and Canada and the World.

### **CANADIAN LAW - LW40S**

This course introduces students to all aspects of the Canadian justice system. However, the primary focus is on criminal law. From arrest procedure to young offenders and the dilemmas of imprisonment, this course is taught using a variety of formats including case studies, debates, mock trials, guest speakers, and a visit to the law courts. Law 40S is an excellent foundation for students interested in pursuing criminology courses at the college or university level.

### **GLOBAL ISSUES: CITIZENSHIP AND SUSTAINABILITY - GI40S**

Students examine the social, political, environmental, and economic impact of a variety of current and emerging world issues such as media awareness, human trafficking, genocide, sustainability, and gender issues. Students will also consider how every individual is connected to global issues. Part of their study will focus on quality of life locally, nationally, and globally. Students will also choose a global issue and act in their school or wider community. This course was formerly known as World Issues.



## **TOPICS IN FIRST NATIONS, METIS, AND INUIT STUDIES - FM40S**

Topics in First Nations, Métis & Inuit Studies (FM40S) addresses the contemporary lives of Aboriginal peoples in Canada. This course will examine the recent history of Aboriginal Peoples' efforts to protect their rights, freedoms, culture, and self-determination. It will also examine a variety of current topics and issues that are relevant to Aboriginal and Canadian society. These topics will also be compared to the lives of indigenous peoples internationally to better understand the global context of these issues.

## **PHYSICAL EDUCATION**

### **PHYSICAL EDUCATION - PE10F (Compulsory Course)**

The intent of the 10F course is to help Senior Years students develop the necessary skills for lifelong physical activity participation and provide students with the necessary knowledge to assist them in making appropriate decisions regarding the health issues facing youth. The skills acquired in this course are based on the fourteen basic movement skills and the five personal and social management skills in a combined and integrated approach blending physical education and health education.

### **PHYSICAL EDUCATION - PE20F (Compulsory Course)**

The intent of the 20F course is to help Senior Years students develop the necessary skills for lifelong physical activity participation and provide students with the necessary knowledge to assist them in making appropriate decisions regarding health issues facing youth. Topics such as fitness management, goal setting, cooperation, time management, and a myriad of physical and health related skills are taught under the five General Learning Outcomes of Movement, Fitness, Safety, Personal and Social Management and Healthy Lifestyle practices.

### **PHYSICAL EDUCATION - PE30F (Compulsory Course)**

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 engage in active lifestyles into their futures. 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% on-line component of the course content. Students will be required to develop and implement the remaining 75% of the course on their own time in a personal physical activity plan as part of the 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, or journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation.

### **PHYSICAL EDUCATION - PE40F (Compulsory Course)**

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 engage in active lifestyles 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% on-line 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.

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, or journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation.

**NOTE:**

All PE classes require parents/guardians to review the student'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 the student's physical activity log through a sign-off procedure.

## **BUSINESS STUDIES**

### **LIFE/WORK PLANNING 20S - LW20S/25S**

Students enrolled in Life/Work courses can expect to gain the skills necessary to secure employment, to be successful in the job/career of choice and to be productive citizens. Curriculum includes resume and cover letter construction, interview skill practice, communication and interpersonal skills development, personal management and transferable skills enhancement, the creation of employability portfolios, and a comprehensive study of workplace expectations.

### **2D COMPUTER ANIMATION - AN35S (1/2 credit)**

This will introduce students to 3-D modeling and 2-D Animation. The first portion will teach students to use Adobe Flash to create and manipulate 2 dimensional animations. Students will learn how to build 3-D models using various programs, including Google Sketchup, Autodesk Maya, and more. Projects produced will include:

Basic Tweening	Working with movie clip symbols
Motion Path Animation	Basic Action Script features
Shape Tweening	Animated Short Stories and Music Videos

### **DIGITAL PHOTOS - DI25S (1/2 credit)**

This course is open to all students who have an interest in learning about how to take better digital photographs and how to plan, design and create a school yearbook. Course concepts include:

Digital Camera Operation	Editing & adjusting photos using Photoshop	Publication Production (InDesign)
Photo Composition	Publication Planning	
Advanced Photography Techniques	Publication Layout & Design	



## **HUMAN ECOLOGY**

### **FAMILY STUDIES - FA40S**

This course focuses on the individual, the family, society, and the factors that affect quality of life. Units of study include the family foundation, strengthening relationships, managing with insight, supporting family and friends, growing as a person, moving towards independence, and forming your own family. Practical experience will be gained in an elderly care setting.

### **PSYCHOLOGY 40S - PY40S**

Psychology is the scientific study of behavior and mental processes. It uses the scientific method to discover ways of understanding the complexities of human thought and behavior, as well as differences among people.

Studying psychology gives students lifelong skills such as dealing with issues proactively, solving problems, learning, and nurturing healthy relationships. It helps students understand themselves, and deal with issues in their own lives such as inner conflicts, relationships with parents and peers, and intimacy. It also helps students understand societal problems like addiction, violence, and prejudice. This course exposes students to the major topics found in the field of psychology. It also emphasizes the issues that are of direct interest and relevance to students completing high school. Students explore the scientific methods upon which psychology is based, which they can then apply to their daily lives.

## **VISUAL ARTS**

### **VISUAL ART - VA10S**

This program is designed to expand learning in the visual arts, beyond skill development. It is designed to provide students with opportunities to identify, separate, relate, analyze, evaluate, and express ideas and feelings with visual images. The program will introduce students to the "art inquiry process," where there is no pre-determined outcome to an idea. Each of the units involves an idea that provides opportunities for students to explore some aspect of their personal world, their natural or social environment, or some other cultural/ historical form of expression related to the idea. Maintaining an Idea Journal/Sketchbook is suggested.

## Credit Planning Sheets

### Provincial Diploma

Grade 9		Grade 10		Grade 11		Grade 12	
Compulsory	Credit	Compulsory	Credit	Compulsory	Credit	Compulsory	Credit
English 10F (0001)	1.0	English 20F (0001)	1.0	English 30S: • English Comprehensive Focus 30S (0092) • English Transactional Focus 30S (0094) • English Literary Focus 30S (0093)	1.0	English 40S: • English Comprehensive Focus 40S (0092) • English Transactional Focus 40S (0094) • English Literary Focus 40S (0093)	1.0
Mathematics 10F (0080)	1.0	Mathematics 20S: • Math Intro to Applied & Pre-Calculus 20S (3905) • Math Essential 20S (3000)	1.0	Mathematics 30S: • Math Applied 30S (3903) • Math Essential 30S (3000) • Math Pre-Calculus 30S (3939)	1.0	Mathematics 40S: • Math Applied 40S (3903) • Math Essential 40S (3000) • Math Pre-Calculus 40S (3939)	1.0
Phys. Ed. 10F (0169)	1.0	Phys. Ed. 20F (0169)	1.0	Phys. Ed 30F (0169)	1.0	Phys. Ed 40F (0169)	1.0
Canada in the Contemporary World 10F (0101)	1.0	Geographic Issues of the 20th Century 20F (1180)	1.0	History of Canada 30F (0105)	1.0		
Science 10F (0120)	1.0	Science 20F	1.0				
Options		Options		Options		Options	
Option 1	1.0	Option 1	1.0	Science Options: • Biology 30S (0124) • Chemistry 30S (0122) • Physics 30S (0123)	3.0	Science Options: • Biology 40S (0124) • Chemistry 40S (0122) • Physics 40S (0123)	3.0
Option 2	1.0	Option 2	1.0	Option 2	1.0	Option 2	
Option 3	1.0	Option 3	1.0	Option 3		Option 3	
Option 4	1.0	Option 4	1.0	Option 4		Option 4	
Option 5	1.0	Option 5	1.0	Option 5		Option 5	

**NOTE: 30 credits are the minimum requirements for graduation**

### Mature Student Graduation Requirements - Minimum of 8 credits

Compulsory Credits	Optional Credits
Grade 12, English Language Arts	Grade 9 - 12, Course 1
Grade 12, Mathematics	Grade 9 - 12, Course 2
Grade 12, Course 1	Grade 9 - 12, Course 3
Grade 12, Course 2	Grade 9 - 12, Course 4

A "mature student" eligible for obtaining a Mature Student High School Diploma under the grade 9 to grade 12 Mature Student Graduation Requirements is one who:

- Is 19 years of age or over at the time of enrolment in school division/district or ALC programming directed at completing the Mature Student Graduation Requirements, or one who will reach the age of 19 before completion of the course(s) in which one is enrolled.
- Has been out of school six months or more, and out of school long enough for the class, of which one was last a member, to have graduated from Senior Years.
- Has not obtained a high school diploma. Students can enroll in a school division/district or Adult Learning Centre for the purpose of obtaining the Mature Student High School Diploma if they are eligible as described above.

## Staff Contacts

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## Resources

Visit Manitoba Education and Advanced Learning for more information about the Senior Years.

<http://www.edu.gov.mb.ca/k12/>

Visit these institutional websites for post-secondary program information.

University of Manitoba <http://www.umanitoba.ca/>

University of Winnipeg <http://www.uwinnipeg.ca/>

Red River College <http://www.rrc.mb.ca/>

Brandon University <http://www.brandonu.ca/>

Collège Universitaire de Saint-Boniface <http://www.ustboniface.mb.ca/>

Canadian Mennonite University <http://www.cmu.ca/>