

GRADE 10, 11 \& 12
COURSE HANDBOOK
2023-2024

## NELSON McINTYRE COLLEGIATE GRADUATION REQUIREMENTS

All students must meet graduation requirements as prescribed by Manitoba Education Training and Youth.

| Grade 9 |  | Grade 10 |  |
| :---: | :---: | :---: | :---: |
| English Language Arts | 1 credit | English Language Arts | 1 credit |
| Mathematics | 1 credit | Mathematics | 1 credit |
| Science | 1 credit | Science | 1 credit |
| Canada/World | 1 credit | Geography | 1 credit |
| Physical Education | 1 credit | Physical Education | 1 credit |
| Career Development | 1 credit | Career Development | 1 credit |
| AICT | 1 credit |  |  |
| Plus 4 (1/2 credit) electives |  | Plus 4 (1/2 credit) electives |  |
| Total | 9 credits | Total | 8 credits |
| Grade 11 |  | Grade 12 |  |
| English Language Arts | 1 credit | English Language Arts | 1 credit |
| Mathematics | 1 credit | Global Issues | 1 credit |
| History | 1 credit | Mathematics | 1 credit |
| Physical Education | 1 credit | Physical Education | 1 credit |
| Career Development | 1 credit | Career Development | 1 credit |
| Plus 2-3 electives (At any level) |  | Plus 2-3 Grade 12 electives |  |
| Total | 7-8 credits | Total | 7-8 credits |
| GRAND TOTAL: | 31-33 credit | necessary for graduation) |  |

*Concert Band, Jazz Band, and Musical Theatre are offered outside of the regular timetable schedule, and do not count as electives. Students can take these beyond the recommended number of electives.

## NELSON McINTYRE REGISTRATION PROCESS

The following outlines the steps and timelines that have been established for the registration of students at Nelson McIntyre Collegiate.
Students and parents are encouraged to obtain as much information as possible and work with their Teachers and Student Services Teachers in order to select programs and courses that will be both challenging and attainable for each student.

## February and March of the Registration Year

1. Nelson McIntyre Student Services Teachers hold meetings to discuss registration, review course options and plan high school paths.
2. Registrations will be completed in the last week of February (after student and parent information meetings).
3. For students outside of our catchment area, the deadline is May $15^{\text {th }}$. Families are encouraged to get them in earlier to ensure placement.

## April of the Registration Year

Course verification forms will be sent home to parents/guardians and must be checked to ensure accuracy. This form lists the courses selected by the student. It is not a guarantee that the students will be registered in each course. Actual course registration is dependent on both schedules and course requests.

## August of the Registration Year

"School Opening" letters will be mailed to students in late August.
***Any course conflicts, that are a result of timetable restrictions, will be dealt with through appointments as detailed in the August letters.

## Important Steps for Registration:

$>$ Step 1 Student Services Teachers will visit classrooms to explain the registration process. Participate in the Grade Level meetings at school to view grade \& course requirements and to ask important questions. Review this Course Selection handbook.
> Step 2 Use My Blueprint to plan your

- Compulsory Courses
- Elective Courses
- Alternative Options Courses
$>$ Step 3 Attend Registration Day session with Student Services Teachers to register. Attend parent information evenings in the last week of February.
$>$ Step 4 Schedules will be handed out on the first day of school in September


## COMPULSORY CREDITS-Grade 10

## INTERDISCIPLINARY APPROACH

Students in Grade 10 will study Science, Geography, English Language Arts, and Career Development: Life/Work Planning in an interdisciplinary model similar to grade 9 .

## ENGLISH 20F

This course develops the six basic strands of English Language Arts (listening, speaking, reading, writing, viewing, and representing). The outcomes require the students to:

- Explore thoughts, ideas, feelings, and experiences
- Comprehend and respond personally and critically to oral, literary, and media texts
- Manage ideas and information
- Enhance clarity and artistry in communication
- Celebrate and build community


## GEOGRAPHY 20F

Prerequisite - Can/World 10F

This course focuses on the geographic issues of the contemporary world. It examines the nature of Geography and the skills related to geographical thinking. Geographic issues are explored in several contexts (local, provincial, national, and international).
Topics Include:

| Geographic Literacy | Industry and Trade |
| :--- | :--- |
| Natural Resources | Urban Places |

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Urban Places

## SCIENCE 20F

Prerequisite - Science $10 F$
The Grade 10 Science curriculum has been designed to develop and emphasize student skills in scientific inquiry while fostering awareness for the nature of science. Science will provide students with many opportunities to explore, analyze, evaluate, synthesize, appreciate, and understand the interrelationships among science, technology, society, and the environment that will affect their personal lives, careers, and their future. Topics Include:

| Lab Safety | Dynamic of Ecosystems |
| :--- | :--- | :--- |
| Chemistry in Action | Motion |

The Physical Education and Health 20F course is an extension of the Grade 9 Physical Education course. In this course students will continue with some of the activities outlined in Grade 9. However, these activities will include a technical aspect that includes a more in depth look at the rules, offensive, and defensive schemes. In addition students will be involved in refereeing in class games and activities. This class will also focus on living a healthy lifestyle including nutrition and diet, healthy lifestyle planning, goal setting, and decision making.

## MATHEMATICS (choice between the following)

## Essential Mathematics 20S

Prerequisite - Mathematics $10 F$
Essential Mathematics (20S) is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Essential Mathematics (20S) is a one credit course. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in a technological society.
Topics Include:

| Analysis of Games and Numbers | Trigonometry | Angle Construction |
| :--- | :--- | :--- |
| Personal Finance | Consumer Decisions | 2-D Geometry |
| Measurement | Transformations |  |

## Introduction to Applied and Pre-Calculus Mathematics 20S Prerequisite - Mathematics 10F (Recommended mark of 60\%)

Introduction to Applied and Pre-calculus Mathematics (20S) is intended for students considering post-secondary studies that require a math prerequisite. This pathway provides students with the mathematical understanding and critical-thinking skills that have been identified for specific post-secondary programs of study.

The topics studied form the foundation for topics to be studied in both Grade 11 Applied Mathematics and Grade 11 Pre-calculus Mathematics.
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. These experiences will provide opportunities for students to make connections between symbolic mathematical ideas and the world around us.

This course is intended for students considering post-secondary study in Sciences (Physics and Chemistry), Engineering, Dentistry and Medicine, Kinesiology, Business, and some trades (among other post-secondary options). Please check with Student Services to verify if this course is necessary for a faculty or study of interest.

## Career Development: Life/Work Planning 20F <br> Or <br> "WEEKS WITHOUT WALLS"

Students will also be offered opportunities to explore their passions and future careers through a series of "Intensive Theme Weeks".
"Week without Walls" or Intensive Theme Weeks offer students an opportunity to try something new or dive deeper into a subject or topic. These courses often allow students an opportunity to explore the areas of study in a variety of settings with field trips both on and off school grounds. Most courses incorporate outside experts to add real world expertise.

Intensives themes will be offered three times per year and will not interrupt other classes. All grade 10 courses will stop while students participate in these enrichment experiences. The preparation and reflection for these weeks, as well as the "in the field learning" will form a Lifeworks: Career Exploration credit. These experiences are designed to help student become exposed to many experiences and career ideas so that as they progress through high school, they will develop a sense of their interests, and potential careers.

Career Exploration is designed to help students develop essential career-building skills that will enable them to be self-reliant and able to construct and manage their life and career. Career Development provides them with the experience of meeting individuals in different careers (tailored specifically to the students in the class) to discover and understand all there is to know about a specific career. Students will develop their own resumes, and practice cover letter writing and interview skills.

Past themes have included the list below and new themes are in development. Student may participate in any session they have not yet taken:

- Architecture and Landscape Architecture
- Social Action
- Indigenous Culture
- Outdoor Pursuits-Spring and Winter
- Caring for Animals
- Yum: A Taste of the Culinary World
- Backstage: Behind the Scenes of Media and the Arts
- Bike Repair
- On the Sidelines: Behind the Scenes of Sport
- Creating Beats
- Exploring Manitoba through Photography
- How it's Made: MBs Industries and Trades
- Beyond the ER: Careers in Health
- Graffiti Arts
- The World of Fashion
- Videography
- Robotics
- A Journey to the Experimental Lakes


## ELECTIVE CREDITS

## Textile Arts and Design 25G

This course is a student led course in textile design and construction. Students will have the opportunity to design and construct unique and individual textile products using the flat pattern method and/or by altering and making modification to commercial patterns. Students will have an opportunity to develop specific areas of interest.

## Dramatic Arts 25S

The goals of Drama 25S are to promote awareness, to foster development and encourage use of imagination, creativity, self-discipline, selfexpression, cooperation, communication, critical analysis, and cultural values. These skills are developed by focusing on elements of drama through exercises in relaxing, energizing, concentrating, practicing movements, performing in group activities, acting out simple story-lines, seeing, listening, speaking, and analyzing scripts and principles of design for the stage. Drama 25S concentrates on awareness of self through exploration of these elements in classroom exercises. This course is designed to be offered in a classroom setting. The aim is not to stage a major drama production but to provide students with an opportunity to explore the varied forms that drama encompasses. Students will be expected to do related readings, research, and homework that include both written assignments and practical exercises in movement, voice, and memorization. Students should also be available to rehearse short pieces outside regular class-time and should choose partners and groups accordingly.

Electronics 25G

## Prerequisite - None

Electronics is intended to further student understanding of electronics through a hands-on approach.
Topics Include:
Understand Electrical Safety
Solve electrical problems using Ohm's Law and Watt's Law
Demonstrate knowledge of passive and active components in Parallel and Series circuits
Construct printed circuit boards
Use electrical test equipment
Explore AC DC rectification, regulation, and filters
Explore semiconductor theory through the study of transistor biasing, switching and amplifications

## Entrepreneurship 20F (This course is a full credit)

Entrepreneurship focuses on developing the foundational skills and ideas needed to plan and develop a business. This course provides an opportunity to be involved in business an entrepreneurial thinking in the real world. Students focus on planning, creating, implementing, evaluating, and growing their own business venture through cafeteria planning and running. This course provides resume building opportunities for students who are interested in the business, hospitality, and culinary arts industries. Gain valuable skills such as collaboration, teamwork, entrepreneurship.... This course will be offered with staggered opportunities throughout the full year with various opportunities in different areas.

## Foods and Nutrition 25G

## Prerequisite - None

Students will gain a greater understanding of the 6 essential nutrients that our bodies need, and discover the strong link between eating habits and lifelong health and wellness. The highlight of foods and nutrition courses is the food labs, which offer a unique opportunity for hands-on application of course material. The recipes chosen are varied, with an emphasis on healthy, whole foods. Students are also given opportunity to create their own recipes.

## French 20F (This course is a full credit.)

The Basic French curriculum is designed to encourage the learning of French as a means of communication and to make it an integral part of the student's overall education. Full bilingualism is not a target of the program.
A multi-dimensional approach is encouraged, consisting of two components:

1. EXPERIENCE - The student will be able to broaden his/her life experience and develop his/her learning and know-how by participating in activities within a variety of fields of experience.
2. COMMUNICATION - The student will be able to participate in French in genuine situations of communication related to a variety of fields of experience.

- The student will be able to understand the meaning of an oral message
- The student will be able to express him/herself orally according to the purpose of communication
- The student will be able to understand the meaning of different types of texts, authentic and adapted.

3. CULTURE - The student will become aware of the culture of his/her community and the francophone cultures as well as those of other people of Canada and the world.
4. LANGUAGE - The student will understand and use orally and in writing, the structures and vocabulary related to the fields of experience.

Graphic Communications 25G builds upon the introductory knowledge of Graphic Communications 15G. The graphic arts section will incorporate the idea of visual media in our everyday lives. Skills in desktop publishing, including page layout, image manipulation and illustration, will be developed. Black \& white photography and darkroom techniques will be developed. Screen-printing using techniques will be performed. Video editing using non-linear editing software on the computer will be introduced

## Power Mechanics 25G <br> Prerequisite - None

This course is designed to increase the students' awareness and understanding of various automotive practices and processes and to relate their significance to various automotive systems, and to continue the development of safe practices.
Topics Include:

| Student Orientation and Safety | Engine Types |
| :--- | :--- |
| Engine Tests and Measurements | Ignition System - Tune Ups |
| Fuel Systems - Carburetion | Brake System |
| Steering System | Suspension |
| Heating and Air Conditioning | Drive Line-Clutch |
| Gas and Arc Welding | Transmissions |

## Visual Art 25S

This is an introductory art program which will provide the student with numerous and varied learning experiences within the area of visual arts. Students will develop their creative problem-solving skills through the application of the artistic inquiry process, one that encourages informed and thoughtful planning when attempting to solve an artistic problem. Students will become familiar with Canadian art styles as well as international art influences.

## Woodworking 25G

## Prerequisite - None

This course is focused in the direction of working with processed materials and the design, and safe building of furniture and case work. The study of construction and finishing will be covered. Upon completion of required work students will have the opportunity to build a design of their own.

## Concert Band 20S (Band is offered at lunch time outside of the schedule and may be taken as an additional credit.)

Students experience and learn about music through participation in the NMC Concert Band. Students perform a wide variety of music selections, addressing instrumental development, music language, knowledge, interpretation, understanding and appreciation of music. The course requires students to participate in a number of group performance opportunities throughout the school year, including the Winter Concert, Optimist Music Festival and the Spring Concert.
This course meets during the lunch hour on alternating days for the full school year.
Musical Instruments: Students may elect to play a woodwind, brass, percussion or string instrument. Ideally it is expected that students provide their own instrument for the course, (either through store rental, purchase or borrowing). School rental of some instruments is available, but limited. There is a usage fee of $\$ 12$ per month for renting the division-owned instruments. (Families-in-need may contact school administration for assistance.)

## Jazz Band 20S (Jazz Band is offered at lunch time outside of the schedule and may be taken as an additional credit.)

Participation in the NMC Jazz Ensemble offers students the opportunity to experience the many different styles of jazz music and develop rhythmic and improvisational skills. The course requires students to participate in a number of group performance opportunities throughout the school year, including the Winter Concert, Optimist Jazz Festival and the Spring Concert.
This course meets during the lunch hour on alternating days, (opposite the Concert Band rehearsals), for the full school year.
Requirements: Students must be enrolled in Concert Band10G/20G/30S/40S in order to enroll in the jazz band credit.

## Nelson McIntyre Course Description Booklet Grade 11

## Semester System

For Grade 11 and 12 s , the school year is divided into two equal semesters. The first semester extends from the beginning of September until approximately the end of January with the second semester extending from February until the end of June.

## COMPULSORY CREDITS

## INTERDISCIPLINARY APPROACH

Students in Grade 11 will take History and English Language Arts through an interdisciplinary Project-Based Learning model.

## English Comprehensive 30S

This course develops the six basic strands of English Language Arts (listening, speaking, reading, writing, viewing, and representing). The outcomes require the students to:
Explore thoughts, ideas, feelings, and experiences
Comprehend and respond personally and critically to oral, literary, and media texts
Manage ideas and information
Enhance clarity and artistry in communication
Celebrate and build community

## History 30F

Prerequisite - Geography 20F
The Grade 11 History of Canada curriculum supports citizenship as a core concept and engages students in historical inquiry. Guided by essential questions, students focus on the history of Canada from pre-contact to the present. Through this process students think historically and acquire enduring understandings related to the following five themes in Canadian history.
Topics Include:

First Nations, Métis, and Inuit People
Identity, Diversity, and Citizenship
Governance and Economics

French-English Duality
Canada and the World

## Physical Education 30FS - Active Healthy Lifestyles

Prerequisite - Phys Ed 20F
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 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. Students will also be introduced to safety and risk management planning. Students will be graded for completion of the course with a CO (complete) or IN (incomplete) designation.

## Career Development: Life/Work Building 30S Or "WEEKS WITHOUT WALLS"

Students will also be offered opportunities to explore their passions and future careers through a series of "Intensive Theme Weeks".
"Week without Walls" or Intensive Theme Weeks offer students an opportunity to try something new or dive deeper into a subject or topic. These courses often allow students an opportunity to explore the areas of study in a variety of settings with field trips both on and off school grounds. Most courses incorporate outside experts to add real world expertise.

Intensive themes will be offered three times per year and will not interrupt other classes. All grade 11 courses will stop while students participate in these enrichment experiences. These experiences are designed to help student become exposed to many experiences and career ideas so that as they progress through high school, they will develop a sense of their interests, and potential careers. Opportunities for Job Shadowing form part of this course.

Career Exploration is designed to help students develop essential career-building skills that will enable them to be self-reliant and able to construct and manage their life and career. Career Development provides them with the experience of meeting individuals in different careers (tailored specifically to the students in the class) to discover and understand all there is to know about a specific career.
Themes will include job shadowing opportunities, as well Financial Literacy, Scholarship Writing, opportunities for Design Competitions and projects, connections with the volunteer and community service and many others.

## GRADE 11 MANITOBA MATHEMATICS CURRICULA

| Pre-Calculus Mathematics | Applied Mathematics | Essential Mathematics |
| :--- | :--- | :--- |
| Designed for students that are planning to <br> take university calculus in such fields as <br> Engineering, Medicine, and Pharmacy. | Designed for students that are planning to <br> take basic post-secondary Math and Science <br> or are entering the world of high technology <br> work. i.e. Education, Nursing, Biology. | Designed for students that are not planning <br> to take post-secondary math or science. <br> Entrance into university in certain faculties <br> is still allowed. |
| Prerequisite is Grade 10 Introduction to <br> Applied \& Pre-Calculus Math. A mark of <br> 65\% is recommended. | Prerequisite is Grade 10 Introduction to <br> Applied \& Pre-Calculus Math. A mark of <br> 65\% is recommended. | Prerequisite is Grade 10 Essential Math. |
| Technology: <br> Scientific calculators only (limited <br> calculator use). | Technology: <br> Will use T1-83plus, T1-84 graphing <br> calculators extensively, and computer <br> spreadsheets. | Technology: <br> Will use scientific calculators and <br> spreadsheets. |
| Algebra: <br> Very extensively used. Much time is spent <br> at solving equations and other algebraic <br> expressions. | Algebra: <br> Students write algebraic equations based on <br> experiments and written problems and using <br> graphing calculators and computer <br> programs to solve the problem. | Algebra: <br> Limited use in Essentials math. |
| Measurement Applications: <br> Do not use calipers and micrometers. | Measurement Applications: <br> Learn practical application of calipers, <br> rulers and micrometers. Students will <br> complete a design and measurement project. | Measurement Applications: <br> Learn practical application of calipers, <br> rulers and micrometers. Students will <br> complete a design and measurement project. |
| Learning Style: <br> Students tend to work closely under the <br> guidance of the teacher to learn the concepts <br> and are expected to complete daily <br> assignments. Extensive testing occurs. | Learning Style: <br> Independent work as well as group work. <br> Students are expected to take increased <br> responsibility for their own learning. | Learning Style: <br> Independent work and group work using <br> knowledge and transforming it into real life <br> applications. |

## Essential Mathematics 30S

Essential Mathematics 30S is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Essential Mathematics 30S is a one credit course. Students are expected to work both individually and in small groups on mathematical concepts and skills encountered in a technological society.

## Topics Include:

| Analysis of Games and Numbers | Managing Money |
| :--- | :--- |
| Interest and Credit | Relations and Patterns |
| 3-D Geometry | Trigonometry |
| Statistics | Design Modeling |

## Pre-Calculus Mathematics 30S

Prerequisite - Introduction to Applied and Pre-Calculus 20S
Grade 11 Pre-Calculus Mathematics (30S) is designed for students who intend to study calculus and related mathematics as part of post-secondary education. Students enrolled in this course should have completed Grade 10 Introduction to Applied and Pre-Calculus with a minimum mark of $65 \%$. This course comprises a high level of theoretical mathematics with an emphasis on factoring and problem solving. Daily homework is the norm. Students should be able to work independently and handle problems different from those presented in class. Topics Include:

Relations and Functions
(Quadratic Equations)
Equation Systems
Inequalities
Reciprocal Functions.

Algebra and Number (absolute value radicals, rational expressions)
Trigonometry
Polynomials

## Pick Your Path

Students in Grade 11 can choose three different paths to complete their electives:

1. Independent Electives (3 credits)
2. Propel-Project Pursuit and Exploration Learning (an interdisciplinary approach-3 credits)
3. ATC-Louis Riel Arts and Technology Centre (4 credits)

## INDEPENDENT ELECTIVE CREDITS

## French 30S

The Basic French curriculum is designed to encourage the learning of French as a means of communication and to make it an integral part of the student's overall education. Full bilingualism is not a target of the program.
A multi-dimensional approach is encouraged, consisting of two components:

- EXPERIENCE - The student will be able to broaden his/her life experience and develop his/her learning and know-how by participating in activities within a variety of fields of experience.
- COMMUNICATION - The student will be able to participate in French in genuine situations of communication related to a variety of fields of experience.
- CULTURE - The student will become aware of the culture of his/her community and the francophone cultures as well as those of other people of Canada and the world.
- LANGUAGE - The student will understand and use orally and in writing, the structures and vocabulary related to the fields of experience.


## THE SCIENCES

## Biology 30S

Prerequisite - Science 20F
Students in Biology 30S 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.

## Topics Include:

Wellness and Homeostasis
Digestion and Nutrition
Control Mechanisms
Circulation

Blood and Immunity
Excretion
Gas Exchange

Introduction to Applied \& Pre-Calculus math is highly recommended if students are choosing this course. Chemistry 30S introduces students to the basic concepts in Chemistry. It serves to develop their mathematical problem solving and laboratory skills. Students enrolled in this course should attain a level of scientific awareness and develop positive attitudes towards science.

## Topics Include:

Scientific Investigation<br>Molecular Weights<br>Moles<br>Molar Volume<br>Density<br>Naming of Compounds<br>Balancing Equations<br>Precipitation

## Stoichiometry

Organic Chemistry
Kinetic Molecular Theory
Percent Composition
Empirical Formula
Gases and Pressure
Volume and Temperature
Ionic Equations

## Computational Physics

Physics 30S (1.0 Credits) and 3-D Modelling 35S ( 0.5 Credits)

## Prerequisite: Science 20F

Introduction to Applied \& Pre-Calculus math is highly recommended.
Computational Physics offers an interdisciplinary approach to learning Physics through coding and learning to code by doing Physics. Students earn credits in both Physics 30S ( 1.0 credits) and 3-D Modelling ( 0.5 credits).

Rather than learn about science, you will learn how to do science. While working collaboratively in groups and using computers equipped with sensors, you will learn how to collect, organize, visualize and model real data. At each step along the way we will build conceptual models involving motion, forces and energy.

One of the fastest growing programming languages these days is python. You will be learning to code in Visual Python (VPython for short), designed specifically for learning physics. The environment takes care of all the beautiful 3D lighting and objects, letting you focus on the laws of physics directly.

## Reasons to take Computational Physics:

- Procedural thinking - the type of thinking you need to cook a delicious meal or take apart and reassemble a car engine - is a transferable skill. In other words, as you get good at computational thinking, you'll get better at: organizing and writing an essay, learning math and studying politics. Just as learning to read and write helps you with everything, procedural thinking is more of a literacy than a subject.
- In coding, you make mistakes constantly and have to sort them out. This builds resilience to repeated failure, a useful life skill. Even the most proficient coders in the world spend a lot of time debugging
- Physics is all about model building. In a computer, you get to make worlds that obey your rules. This is a powerful way of thinking about the world. The desire to build more and more accurate models on the computer mimics our desire as physicists to build more and more accurate models of the universe.

By taking Computational Physics you will learn more than simply how the universe works-you will develop ways of analyzing problems, finding patterns and developing models that explain, illuminate and problem solve.

## Dramatic Arts (1A) DA30S

## Prerequisite - None

This course is a continuation of the 25 S course currently being offered. Students in both the 30 S and 40 S class will be taught together. Students enrolled in Drama 30S will be involved in directing assignments, and 40S students will be issued directing and script writing assignments. This course can be taken by Grade 9 and 10 students as a half-credit. Please talk to your Student Services Teacher for more information.

## Musical Theater (3A) 30S (1 credit) <br> Prerequisite - none

Nelson McIntyre Collegiate offers the participation in the music theatre option for those students with special skills in singing, dancing, and acting. The program's rigorous curriculum includes training in the disciplines of acting, voice, movement and dance and deals with the genre of the epic musical. An option to participate on the production side (crew) is also available to students.

## Entrepreneurship

## Venture Development 30S

Venture Development builds upon the concepts and ideas studied in Entrepreneurship (0319). Students focus on planning, creating, implementing, evaluating, and growing their own business venture. Venture Development is designed for students interested in starting their own business and in furthering their knowledge of business ownership and management principles.

This course provides an opportunity to be involved in business an entrepreneurial thinking in the real world. Students focus on planning, creating, implementing, evaluating, and growing their own business venture through cafeteria planning and running. This course provides resume building opportunities for students who are interested in the business, hospitality, and culinary arts industries. Gain valuable skills such as collaboration, teamwork, entrepreneurship. This course will be offered each semester and includes practical hours before and during the lunch hours.

## Music

## Concert Band (1A) CB30S

Students experience and learn about music through participation in the NMC Concert Band. Students perform a wide variety of music selections, addressing instrumental development, music language, knowledge, interpretation, understanding and appreciation of music. The course requires students to participate in a number of group performance opportunities throughout the school year, including the Winter Concert, Optimist Music Festival and the Spring Concert.
This course meets during the lunch hour on alternating days for the full school year.
Musical Instruments: Students may elect to play a woodwind, brass, percussion or string instrument. Ideally it is expected that students provide their own instrument for the course, (either through store rental, purchase or borrowing). School rental of some instruments is available, but limited. There is a usage fee of $\$ 12$ per month for renting the division-owned instruments. (Families-in-need may contact school administration for assistance.)

## Jazz Band (5A) JB 30S

Participation in the NMC Jazz Ensemble offers students the opportunity to experience the many different styles of jazz music and develop rhythmic and improvisational skills. The course requires students to participate in a number of group performance opportunities throughout the school year, including the Winter Concert, Optimist Jazz Festival and the Spring Concert.
This course meets during the lunch hour on alternating days, (opposite the Concert Band rehearsals), for the full school year.
Requirements: Students must be enrolled in Concert Band10G/20G/30S/40S in order to enroll in the jazz band credit.

## Guitar (3A) GU30S

> Prerequisite - Guitar 10S or permission from instructor

Students learn to perform on the guitar, both as a soloist and in guitar ensembles. Students develop their music skills in various aspects, learning through a range of musical styles. The course requires students to participate in a group concert performance during the semester.

Music Fees: Students enrolled in the guitar program are required to pay a school division yearly fee of $\$ 40.00$ for use of division-owned instruments. (Families-in-need may contact school administration for assistance.)

## VISUAL ARTS

## Visual Art (1A) VA30S

The 40S program will focus on the development of studio and portfolio practice. A keen interest in the practice of art-making is assumed and the intent is to prepare students for post-secondary level art programs. Students are expected to be self-directed in their development as an artist.

Through artist's talks, gallery visits, class work and studio practice, students may expect to develop a strong body of artwork. The emphasis will be on the pursuit of art preferences and the facilitation of skill development in these areas.

## HUMAN ECOLOGY

## Textile Design and Construction 30S Prerequisite - None

This course is a student led course in textile design and construction. Students will have the opportunity to design and construct unique and individual textile products using the flat pattern method and/or by altering and making modification to commercial patterns. In addition, students will be looking at the global effects of their clothing and textile choices with a focus on upcycling and altered couture.

## Foods and Nutrition 30S <br> Prerequisite - None

This course promotes the development of personal health by exploring the psychology of food choices and provides the opportunity for selfassessment of eating habits. Current food trends are explored and analyzed as well as diet related concerns such as fad diets and sports nutrition. We celebrate cultural diversity by examining the culinary regions of Canada, and focus on the food industry unique to Manitoba.
The highlight of foods and nutrition courses is the food labs, which offer a unique opportunity for hands-on application of course material. We create a wide variety of healthy dishes which challenge students' abilities and expand their repertoire.

## INDUSTRIAL ARTS

## Electronics 30G

## Prerequisite - None

Topics Include:
Electronics 30G is designed to further student understanding of electronics and electricity. This course offers theoretical and hands-on learning experiences. Emphasis is placed on those areas of industry, which show dynamic growth such as digital circuits and computer assisted design. Topics Include:

Digital electronics, integrated circuits, logic, clocks, timers, counting circuits.
Residential wiring practice
Computer assisted design and testing.
Projects include: Sound activated switch, directional microphone

## Graphic Arts 30G Prerequisite - None

Graphic Communications 30G builds upon the knowledge of Graphic Communications 25G. Black \& white photography will be continued. Photo manipulation and illustration software will be used to create graphics for multi-colored screen-printing and page-layout projects. The images may also be incorporated into multi-media projects such as web sites, video production, and computer animation.

## Power Mechanics 30S

Prerequisite - None
This course is designed to increase the student's awareness and understanding of various automotive practices and processes. To enable the student to perform various repairs and maintenance functions on various automotive systems and to continue the development of safe practices.
Topics Includes:
$\begin{array}{ll}\text { Student Orientation and Safety } & \text { Electrical Systems } \\ \text { Automatic Transmissions } & \text { Exhaust Systems }\end{array}$
Engine Rebuilding
Arc and Gas Welding

## Woodworking 30G <br> Prerequisite - None

This full credit course will allow students to work towards their area of interest inside this discipline. The course will cover advanced techniques in frame and panel construction, case construction, problem solving, advanced power tools, wood joinery, five-piece door construction, finishing, and guitar building is an option with shared costs with the students.

## THE HUMANITIES

Current Topics in First Nations, Métis and Inuit Studies: Offered 2020-2021 (every other year) for Grade 11 and 12 students Prerequisites - None

## A Foundation for Implementation 40S

AS40S is a multi-disciplinary course that allows students to explore and develop skills and concepts in the Arts, ELA, Geography, History, Social Studies, and Law. This course focuses on current issues that face Canada and our aboriginal citizens in recent and current history. Our text is First Nations, Inuit, and Métis Peoples: Exploring Their Past, Present, and Future.

## Psychology 40S Offered 2019-2020 (every other year) for Grade 11 and 12 students Prerequisite - None

The objectives of this course are to encourage student self-reliance in pursuing educational goals. In this case, the goals are the study of human behavior (both normal and abnormal) from biological, psychological, and social perspectives.
Topics Include:

Learning and Conditioning
Social and Cultural Behaviors
Thinking and Intelligence
Sensation and Perception
Memory

Human Sexuality
Health and Coping
Psychological Disorders
Personality Theory
Emotion

## PROPEL—PROJECT PURSUIT \& EXPLORATION LEARNING (GR. 11)

Propel is an interdisciplinary, project-based learning environment where students earn 3-4 credits while pursuing an individualized area of interest. The program takes place for one semester at Nelson McIntyre Collegiate and incorporates the following credits:

- Transactional English 30S
- Information and Communication Technology (ICT) 30S
- 1-2 other possible credit depending on the topic and depth of study
- Phys. Ed. is the preferred compulsory course to take with Propel.

Through the Propel Program, students will get

- Flexibility in work hours-there is no set schedule of classes as the work is interdisciplinary
- Creative work spaces-we'll find spaces on and off campus along with professional project mentors to assist in the project
- Individualized self-directed learning, developing time-management and project management skills along the way.

Propel approaches learning through a $21^{\text {st }}$ Century lens; it provides a strong foundation in literacy and deeper learning while also preparing students to

- Think critically and pursue in-depth inquiry
- Exercise choice while holding themselves accountable
- Problem solve creatively
- Build partnerships and collaborate with others
- Gain meaningful employment and/or make connections in the professional world
- Succeed in post-secondary education


## Nelson McIntyre Course Description Booklet Grade 12

## Semester System

The Nelson McIntyre Collegiate school year is divided into two equal semesters. The first semester extends from the beginning of September until approximately the end of January with the second semester extending from February until the end of June.

## COMPULSORY CREDITS

## INTERDISCIPLINARY APPROACH

Students in Grade 12 will take Global Issues and English Language Arts through an interdisciplinary Project-Based Learning model.

## English Comprehensive 40S

This course develops the six basic strands of English Language Arts (listening, speaking, reading, writing, viewing, and representing). The outcomes require the students to:

- Explore thoughts, ideas, feelings, and experiences
- Comprehend and respond personally and critically to oral, literary, and media texts
- Manage ideas and information
- Enhance clarity and artistry in communication
- Celebrate and build community

This course has a provincial standards exam.

## Global Issues 40S

Global Issues examines human societies and the complex interactions among human beings living together in a shared world. This course provides a lens of ecological literacy through which students can study and understand the complex and often critical global issues that societies face today. Through this lens, students

- apply concepts related to sustainability
- learn about the interdependence of environmental, social, political, and economic systems
- develop competencies for thinking and acting as ecologically literate citizens committed to social justice


## English 40S - English as an Additional Language for Academic Success

This course is designed for advanced-level English as Additional Language (EAL) students who wish to further develop their academic English language skills required for success in Senior Years and post-secondary education. Advanced EAL students who have studied English as a second language will benefit from integrated ELA/EAL courses, which reinforce and build proficiency in a range of language knowledge and skills required across the Senior Years curriculum and areas of post-secondary study. This course will help ensure success for advanced EAL learners in grade 12 across a number of subject areas, with emphasis on the sciences, mathematics, and social sciences, as well as help students prepare for post-secondary education.
Topics Include:

| Grammar Practice | Practice Pronunciation | Linguistic Structures | Listening Skills |
| :--- | :--- | :--- | :--- |
| Vocabulary Study | Subject-Based Vocabulary | Discussion | Short Speeches |
| Interpreting and Producing Subject-Area Text | Opportunity to use Relevant Vocabulary |  |  |

PHYSICAL EDUCATION Students are required to bring appropriate physical education attire (non-marking runners, sweats or shorts, and a $T$-shirt) and are required to fully participate in all activities. Students are required to maintain a fitness journal to track and reflect upon their progress throughout the semester. Students may also be required to pay a small fee for certain activities.

## Physical Education 40FS - Active Healthy Lifestyles

## Prerequisite Phys. Ed 30FS

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 into their futures. Students will study topics related to fitness management, nutrition, social/emotional health, and personal development. The focus of this content will be on health and personal planning. Students will also be introduced to safety and risk management. 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 CO (complete) or IN (incomplete) designation.

## Career Development: Life/Work Transitioning 40S

Or
"WEEKS WITHOUT WALLS"

Students will also be offered opportunities to explore their passions and future careers through a series of "Intensive Theme Weeks".
"Week without Walls" or Intensive Theme Weeks offer students an opportunity to try something new or dive deeper into a subject or topic. These courses often allow students an opportunity to explore the areas of study in a variety of settings with field trips both on and off school grounds. Most courses incorporate outside experts to add real world expertise.

Intensive themes will be offered three times per year and will not interrupt other classes. All grade 12 courses will stop while students participate in these enrichment experiences. These experiences are designed to help student become exposed to many experiences and career ideas so that as they progress through high school, they will develop a sense of their interests, and potential careers. Opportunities for Job Shadowing form part of this course.

Career Exploration is designed to help students develop essential career-building skills that will enable them to be self-reliant and able to construct and manage their life and career. Career Development provides them with the experience of meeting individuals in different careers (tailored specifically to the students in the class) to discover and understand all there is to know about a specific career.

Themes will include job shadowing opportunities, as well Financial Literacy, Scholarship Writing, opportunities for Design Competitions and projects, connections with the volunteer and community service and many others.

## GRADE 12 MANITOBA MATHEMATICS CURRICULA

| Pre-Calculus Mathematics | Applied Mathematics | Essential Mathematics |
| :--- | :--- | :--- |
| Designed for students that are planning to <br> take university calculus in such fields as <br> Engineering, Medicine, and Pharmacy. | Designed for students that are planning to <br> take basic post-secondary Math and Science <br> or are entering the world of high technology <br> work. i.e. Education, Nursing, Biology. | Designed for students that are not planning <br> to take post-secondary math or science. <br> Entrance into university in certain faculties <br> is still allowed. |
| Prerequisite is Grade 10 Introduction to <br> Applied \& Pre-Calculus Math. A mark of <br> 65\% is recommended. | Prerequisite is Grade 10 Introduction to <br> Applied \& Pre-Calculus Math. A mark of <br> 65\% is recommended. | Prerequisite is Grade 10 Essential Math. |
| Technology: <br> Scientific calculators only (limited <br> calculator use). | Technology: <br> Will use T1-83plus, T1-84 graphing <br> calculators extensively, and computer <br> spreadsheets. | Technology: <br> Will use scientific calculators and <br> spreadsheets. |
| Algebra: <br> Very extensively used. Much time is spent <br> at solving equations and other algebraic <br> expressions. | Algebra: <br> Students write algebraic equations based on <br> experiments and written problems and using <br> graphing calculators and computer <br> programs to solve the problem. | Algebra: <br> Limited use in Essentials math. |
| Measurement Applications: <br> Do not use calipers and micrometers. | Measurement Applications: <br> Learn practical application of calipers, <br> rulers and micrometers. Students will <br> complete a design and measurement project. | Measurement Applications: <br> Learn practical application of calipers, <br> rulers and micrometers. Students will <br> complete a design and measurement project. |
| Learning Style: <br> Students tend to work closely under the <br> guidance of the teacher to learn the concepts <br> and are expected to complete daily <br> assignments. Extensive testing occurs. | Learning Style: <br> Independent work as well as group work. <br> Students are expected to take increased <br> responsibility for their own learning. | Learning Style: <br> Independent work and group work using <br> knowledge and transforming it into real life <br> applications. |

## Essential Mathematics 40S

This course should be taken by students who have:
Completed Essentials Mathematics in Grade 11 or Completed Pre-Calculus Math 30S and/or Applied Mathematics 30S.
This course is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. Grade 12 Essential Mathematics (40S) is a course that intends to assist students to understand the impact that mathematics and its applications have made on society and how this influences their own lives. Assessment will include a portfolio, which may be provincially evaluated. There will be a provincial exam written in this course.
Topics Include:

| Analysis of Games and Numbers | Life/Career Project | Taxation |
| :--- | :--- | :--- |
| Income and Debt | Investments | Variation and Formulas |
| Personal Finance | Government Finances |  |

## Applied Mathematics 40S

Prerequisite - Applied Mathematics 30S
The goals of Grade 12 Applied Mathematics are to ensure that students:

- Investigate mathematical situations and present results using mathematical language
- Solve problems using a variety of techniques, including technology, and communicate solutions in oral and written forms.

Topics Include:

| Matrices | Statistical Analysis | Sequences |
| :--- | :--- | :--- |
| Vectors | Design and Measurement | Periodic Functions |
| Personal Finance | Probability |  |

It is required that each student either own or purchase a TI-83 Plus or TI-84 calculator for this course. There will be a provincial exam written in this course and is worth $30 \%$ of the final grade.

## Pre-Calculus Mathematics 40S

Prerequisite-Pre-Calculus Mathematics 30S
Students who take this course should have completed Pre-Calculus Math 30S with a mark of at least $65 \%$. This course is designed for students with a high level of Math skills. Students must be able to handle abstract concepts and be analytical thinkers. Course material is covered fairly quickly and daily homework is the norm. Students, therefore, must be able to work independently. A provincial exam is written upon completion of the course. This course is essential for students pursuing a career in Engineering, Pharmacy, Agriculture, or Business.
Topics Include:

| Circular Functions | Permutations and Combinations | Geometric Sequences | Probability |
| :--- | :--- | :--- | :--- |
| Transformations | Conics | Exponents and Logarithm | Trigonometric Identities |

## Pick Your Path

Students in Grade 12 can choose three different paths to complete their electives:

1. Independent Electives (3 credits)
2. Propel-Project Pursuit and Exploration Learning (an interdisciplinary approach-3 credits-these are compulsory. Independent Electives would be added to this combination)
3. ATC—Louis Riel Arts and Technology Centre (4 credits)

## PROPEL-PROJECT PURSUIT \& EXPLORATION LEARNING (GR. 12)

Propel is an interdisciplinary, project-based learning environment where students earn 3-4 credits while pursuing an individualized area of interest.
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- Transactional English 40S
- Global Issues 40S
- 1-2 other possible credit depending on the topic and depth of study
- Physical Education 40F is the preferred required course to take with Propel.

Through the Propel Program, students will get

- Flexibility in work hours-there is no set schedule of classes as the work is interdisciplinary
- Creative work spaces-we'll find spaces on and off campus along with professional project mentors to assist in the project
- Individualized self-directed learning, developing time-management and project management skills along the way.

Propel approaches learning through a $21^{\text {st }}$ Century lens; it provides a strong foundation in literacy and deeper learning while also preparing students to

- Think critically and pursue in-depth inquiry
- Exercise choice while holding themselves accountable
- Problem solve creatively
- Build partnerships and collaborate with others
- Gain meaningful employment and/or make connections in the professional world
- Succeed in post-secondary education


## INDEPENDENT ELECTIVE CREDITS

## French 40S

The Basic French curriculum is designed to encourage the learning of French as a means of communication and to make it an integral part of the student's overall education. Full bilingualism is not a target of the program.
A multi-dimensional approach is encouraged, consisting of two components:

1. EXPERIENCE - The student will be able to broaden his/her life experience and develop his/her learning and know-how by participating in activities within a variety of fields of experience.
2. COMMUNICATION - The student will be able to participate in French in genuine situations of communication related to a variety of fields of experience.

- The student will be able to understand the meaning of an oral message.
- The student will be able to express him/herself orally according to the purpose of communication.
- The student will be able to understand the meaning of different types of texts, authentic and adapted.

3. CULTURE - The student will become aware of the culture of his/her community and the francophone cultures as well as those of other people of Canada and the world.
4. LANGUAGE - The student will understand and use orally and in writing, the structures and vocabulary related to the fields of experience.

## Business Management 40S

Business Management focuses on developing skills in planning, leading, organizing, controlling, and staffing. Students will study various management styles and participate in activities related to human resources, inventory, finance, and project management. This course is designed for students interested in furthering their knowledge of management strategies used in various settings and furthering their knowledge of business ownership.

This course provides an opportunity to be involved in business an entrepreneurial thinking in the real world. Students focus on planning, creating, implementing, evaluating, and growing their own business venture through cafeteria planning and running. This course provides resume building opportunities for students who are interested in the business, hospitality, and culinary arts industries. Gain valuable skills such as collaboration, teamwork, entrepreneurship. This course will be offered each semester and includes practical hours before and during the lunch hours.

## THE SCIENCES

## Biology 40S

Prerequisite - Science 20F
Students will master key biological concepts, principles and ideas. Students will develop an understanding and appreciation of the nature of science, methods of scientific inquiry, diversity of life, interrelations existing between organisms, the effects technology has on the advancements in biological science and the resulting effects on society. They will also develop an understanding and appreciation of the relevance of biology as an integral part of their everyday lives. Students will also develop an understanding and appreciation of the place of humans in nature and the effects that humans have on their environment.

## Topics Include:

Genetics Biodiversity Ecology

## Chemistry 40S

Prerequisite - Chemistry 30S

Students who choose this course should have completed Chemistry 30S, and Math Pre-Calculus 30S or
Applied Math 30S is also highly recommended. This course will provide students with mathematical, theory, and laboratory experiences in Chemistry. It will develop critical thinking and problem-solving skills as well as an understanding of the process of science. Students should attain a scientific awareness that is essential for all citizens. This course is essential if entering the faculty of engineering, pharmacy, or those students who wish to enter science.
Topics Include:

Reaction Kinetics
Chemical Equilibrium
Solutions-Ionic \& Molecular
Atomic Structure
Electrochemical Cells

PH, Hydrolysis, Acid/Base Reactions and Titration
Oxidation-Reduction Reactions
KSP \& Solubility
Periodic Trends
Electrolytic Cells

## Physics 40S

Students who choose this course should have completed Physics 30S, and Math Pre-Calculus 30S or Applied Math 30S is also highly recommended. Physics 40 S is intended for students wishing to increase their knowledge of physics and who are considering furthering their education in science, technology or engineering at university or college after high school graduation.
Topics Include:
Introduction to Physics
Mechanics
Modern Physics
Fields

## Dramatic Arts (1A) DA40S

This course is a continuation of the 25 S course currently being offered. Students in both the 30 S and 40 S class will be taught together. Students enrolled in Drama 30S will be involved in directing assignments, and 40S students will be issued directing and script writing assignments.

## Musical Theater (3A) 40S (1 credit)

## Prerequisite - none

Nelson McIntyre Collegiate offers the participation in the music theatre option for those students with special skills in singing, dancing, and acting. The program's rigorous curriculum includes training in the disciplines of acting, voice, movement and dance and deals with the genre of the epic musical. An option to participate on the production side (crew) is also available to students.

## Music

## Concert Band (1A) CB40S

Students experience and learn about music through participation in the NMC Concert Band. Students perform a wide variety of music selections, addressing instrumental development, music language, knowledge, interpretation, understanding and appreciation of music. The course requires students to participate in a number of group performance opportunities throughout the school year, including the Winter Concert, Optimist Music Festival and the Spring Concert.
This course meets during the lunch hour on alternating days for the full school year.
Musical Instruments: Students may elect to play a woodwind, brass, percussion or string instrument. Ideally it is expected that students provide their own instrument for the course, (either through store rental, purchase or borrowing). School rental of some instruments is available, but limited. There is a usage fee of $\$ 12$ per month for renting the division-owned instruments. (Families-in-need may contact school administration for assistance.)

## Jazz Band (5A) JB 40S

Participation in the NMC Jazz Ensemble offers students the opportunity to experience the many different styles of jazz music and develop rhythmic and improvisational skills. The course requires students to participate in a number of group performance opportunities throughout the school year, including the Winter Concert, Optimist Jazz Festival and the Spring Concert.
This course meets during the lunch hour on alternating days, (opposite the Concert Band rehearsals), for the full school year.
Requirements: Students must be enrolled in Concert Band10G/20G/30S/40S in order to enroll in the jazz band credit.

Students learn to perform on the guitar, both as a soloist and in guitar ensembles. Students develop their music skills in various aspects, learning through a range of musical styles. The course requires students to participate in a group concert performance during the semester.

Music Fees: Students enrolled in the guitar program are required to pay a school division yearly fee of $\$ 40.00$ for use of division-owned instruments. (Families-in-need may contact school administration for assistance.)

## VISUAL ARTS

## Visual Art (1A) VA40S Prerequisite - Visual Art 30S or permission for instructor

The 40S program will focus on the development of studio and portfolio practice. A keen interest in the practice of art-making is assumed and the intent is to prepare students for post-secondary level art programs. Students are expected to be self-directed in their development as an artist.

Through artist's talks, gallery visits, class work and studio practice, students may expect to develop a strong body of artwork. The emphasis will be on the pursuit of art preferences and the facilitation of skill development in these areas.

## HUMAN ECOLOGY

## Textile Arts and Design 40S

## Prerequisite - None

This course is a student led course in textile design and construction. Students will have the opportunity to design and construct unique and individual textile products using the flat pattern method and/or by altering and making modification to commercial patterns. Students will explore the workings of the textile industry and explore marketability in relationship to project development.

## Foods and Nutrition 40S

## Prerequisite - None

Students are challenged with the current issues of hunger, both locally and globally and study the global food supply. That leads into the study of international foods and research on a country of choice kicks off the presentation of "Food Folklorama". We explore the latest in food technology: irradiated foods; genetically modified foods and organic food. Finally, concentrate on developing life skills by planning nutritious meals within a limited budget. The focus in the food labs is more experimental and challenging but will also be practical to offer a healthy repertoire of recipes for future independent living.

## INDUSTRIAL ARTS

## Electronics 40S

Topics Include:
Solve electronics related problems
Robotics/microcontrollers
Research topics in electronic

Automotive stereo installation
Apply student knowledge of electronics in designing projects

## Graphic Arts 40S Prerequisite - None

Graphics 40S course is intended to give students a variety of problem solving and design challenges to apply their knowledge of graphic communications. The gathering of information, planning, evaluating, and presentation of final solution process will be followed. Students are expected to overcome the many hurdles that arise in the publication process. Students will also be given the opportunity to further develop areas of special interests to them, within the graphic communications area.

## Power Mechanics 40S Prerequisite - None

This course is designed to have students rebuild various automotive components, and to increase the students' awareness of and their suitability for the employment market.
Topics Include:

| Student Orientation and Safety | Mig Welding |
| :--- | :--- |
| Fuel System: Carb. Rebuild, Fuel Injection | Automatic Transmission Rebuilds |
| Engine Head Rebuild | Engine Diagnostic Analysis |

## Woodworking 40S - Furniture Design Technology <br> Prerequisite - None

The technology 40S program is designed to give students the opportunity to investigate students' area of interest. A good understanding of math and science would be beneficial. Guitar building is a shared cost option for students enrolled in this course
Topics Include:
To promote the development of basic and generic skills in the use of common industrial tools and machines, and the implementation of processes. To develop a learning environment and attitude that fosters achievement in a practical manner
To promote the development of problem solving skills
To enable students to acquire an appreciation for decision making and problem-solving techniques.
Topics Include:
Student Orientation and Safety Power Tools/Operations - Advanced CAD
Processed Materials

## THE HUMANITIES

Current Topics in First Nations, Métis and Inuit Studies: Offered 2020-2021 (every other year) for Grade 11 and 12 students

## A Foundation for Implementation 40S

AS40S is a multi-disciplinary course that allows students to explore and develop skills and concepts in the Arts, ELA, Geography, History, Social Studies, and Law. This course focuses on current issues that face Canada and our aboriginal citizens in recent and current history. Our text is First Nations, Inuit, and Métis Peoples: Exploring Their Past, Present, and Future. This course will also have other readings, speakers, discussions, and field trips, but it will also entail one research project to be chosen by the student's individual interests. Assessment: $70 \%$ term work \& participation, $30 \%$ final project.

## Psychology 40S Offered 2019-2020 (every other year) for Grade 11 and 12 students Prerequisite - None

The objectives of this course are to encourage student self-reliance in pursuing educational goals. In this case, the goals are the study of human behavior (both normal and abnormal) from biological, psychological, and social perspectives. Instructional techniques include reading assignments, projects, lecture, and small and large discussion groups. Once the basics of the history, current practices, and methodology of psychology have been covered, students will be given some choice in chapter topics to cover.
Topics Include:

Learning and Conditioning
Social and Cultural Behaviors
Thinking and Intelligence
Sensation and Perception
Memory

## Human Sexuality

Health and Coping
Psychological Disorders
Personality Theory
Emotion

## MISCELLANEOUS COURSES

## Community Service Student Initiated Project (CSSIP)

## Prerequisite - None

Volunteering is one of the greatest natural resources and is essential to a healthy community. Community Service can be an enriching experience, as it becomes a learning opportunity blending volunteering and learning goals that become mutually beneficial. Students involved in service learning can make lasting and significant contributions to their community while enhancing their education and expanding their life experiences. Volunteering fosters personal development in the areas of self-image, social sensitivity, teamwork skills, civic knowledge and responsibility, career exploration and critical thinking as well as emphasizing skills and attitudes necessary for responsible citizenship.
The Community Service Student Initiated Project (SIP) Credit Option enables those students who make a contribution to their community by volunteering for approved causes or organizations, to receive recognition for the civic skills, knowledge, and attitudes obtained in the volunteer activity. By providing a Community Service Student-Initiated Project (SIP), students have the opportunity to obtain credit for a private activity in a pre-approved placement for which they may receive either .5 credit ( 55 hours minimum) or 1.0 ( 110 hours minimum).

Arrangements must be made with Students Services prior to completion of the credit.
Cultural Exploration Student-Initiated Project (CESIP) Prerequisite - None
Students can gain valuable educational experience by enhancing their knowledge of their own cultural origins or a cultural group that interests them through interaction with community members such as elders and members of cultural organizations. The skills, knowledge and attitudes obtained from such activities can increase a student's self-esteem and maturity, strengthen cultural identity and/or provide greater intercultural understanding and an appreciation of cultural diversity.

Arrangements must be made with Students Services prior to starting the credit.

## SPECIAL LANGUAGE CREDITS

Students may be awarded up to four special language credits through two pathways:

- By presenting recognized credentials (transcripts, report cards, certificates of standing etc.) that demonstrate prior instruction or proficiency in languages other than English or French
- By successfully completing special language examinations. Arrangements are made through the school principal for a qualified examiner to assess the student's oral and written skills.


## PRIVATE MUSIC OPTION

Students can earn up to four optional credits if they meet the requirements of the Conservatory Canada or the Royal Conservatory of Music programs. Arrangements are made through the school principal for these credits to be recorded. These credits do not count towards graduation.

## Online Courses - (2023-2024)

## Why Take an Online Course?

Various circumstances can make online courses an appropriate option for some students:
An interest in learning through this delivery method
Course conflict
Full schedule
Course not offered at their home school
School absence due to illness/surgery; elite athletics; etc.
The need to change or add a course once the term has started

## Am I a Candidate for an Online Course?

Taking a course online is challenging and requires students to be willing to commit the same amount of time as they typically would in a face-toface classroom environment. Past experience indicates that to be successful, you should possess the following characteristics:

Capable of an appropriate level of independent learning
Excellent time management skills
A willingness to contribute to discussions and to share problems and opinions online

## How Does an Online Course Work?

An online course delivery tool called $\boldsymbol{W e b} \boldsymbol{C T}$ is used to deliver course content. Teachers working from various LRSD high schools provide students with course outlines, assignments, tests and feedback using this system and e-mail. Course content is available on the Internet at all times. Students will have a school contact teacher to facilitate communication and provide additional support.
Some course previews can be found at: http://webct.merlin.mb.ca/webct/entryPageIns.dowebct
Login with "demo" for both user name and password.
Online Courses offered in 2023-2024

- Applied Mathematics 30S
- Applied Mathematics 40S
- Essential Mathematics 30S
- Essential Mathematics 40S
- Physical Education 30S
- Physical Education 40S
- Biology 30S
- Biology 40S
- English Comprehensive Focus 30S
- English Comprehensive Focus 40S
- English Transactional Focus 40S
- History 30F


## Fast Forward - Post Secondary Today!

Fast Forward is a unique opportunity for Louis Riel high school students to earn university and college credits in partnership with University of Winnipeg, Université de Saint-Boniface, Red River College, and the University of Manitoba while they are still in high school. These courses are free and are considered dual credits; they count for high school graduation and university or college credit with our partner institutions.

Fast Forward courses will:Follow Canadian university or college curriculum
Be taught by university or college accredited professors/instructors
Be recognized by Canadian universities and colleges

## When can students begin Fast Forward courses?

University or college course work can begin in Grade 11. Students must have completed 22 high school credits (maintaining a $70 \%$ academic average), completed at least one 40S credit or in consultation with/or at the school's discretion.

## When are courses offered in 2023-2024?

Second semester

## Is there a cost for Fast Forward Courses?

The only cost will be the registration fee for the post-secondary institution (approximately $\$ 80$ ). Course enrolment is free (costs are covered by the Louis Riel School Division) and represents a significant cost reduction to a student's post-secondary program.

## Can students withdraw from the course if they find it is not for them?

University or college transcripts will not include courses from which students withdraw two weeks prior to the final exam.

## What courses will be offered?

Courses offered will be dependent on enrolment and may include first year:

- Calculus
- English


