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**COURSE HANDBOOK**

**2024-2025**

**NELSON McINTYRE REGISTRATION PROCESS: GRADE 9**

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 staff 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 with students from feeder elementary schools to plan and complete registration activities.

2. Students applying from schools outside Nelson McIntyre’s catchment area should return registration forms as soon as possible to ensure a space in the program. Opening day for Schools of Choice applications is February 1st. Deadline for Schools of Choice applications is May 15. Please see further information about Schools of Choice applications by clicking [here](https://www.lrsd.net/page/1375/schools-of-choice).

**June of the Registration Year**

A school letter with an update on student registrations will be sent out by the end of June.

**IMPORTANT REGISTRATION INFORMATION**

This handbook has been compiled to acquaint students, parents, and guardians with information about the courses offered at Nelson McIntyre Collegiate.

Course and grade level selection is very important. It will influence a student’s success and satisfaction over his/her high school years. A student’s course selection will affect career and post-secondary opportunities. For this reason, it is important to make selections carefully. Students should consider their personal interests, abilities, and aspirations in selecting courses.

Course planning is critical. Students, parents, and guardians are encouraged to contact Student Services teachers if they have any questions or concern

**NELSON McINTYRE COLLEGIATE GRADUATION REQUIREMENTS**

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

**Grade 9** **Grade 10**

Canada In The Contemporary World 1 credit English Language Arts 1 credit

English Language Arts 1 credit Geographic Issues of the 21st Century 1 credit

Science 1 credit Life-Work Planning 1 credit

Reading is Thinking 1 credit Physical Education 1 credit

Mathematics 1 credit Science 1 credit

Physical Education 1 credit Essential Mathematics or

Life-Work Exploration 1 credit Intro to Applied & Pre-Calculus Math 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 Comprehensive 1 credit Physical Education 1 credit

History of Canada 1 credit \*Plus one of the following:

History Physical Education 1 credit ELA: Literacy Focus + Cinema as a Witness to Modern History or

Applied Mathematics or ELA: Comprehensive Focus + Global Issues 2 credits

Essential Mathematics or

Pre-Calculus Mathematics 1 credit Applied Mathematics or

Essential Mathematics or

Pre-Calculus Mathematics 1 credit

Career **Plus 3 electives**  **Plus 2-3 Grade 12 electives**

(At any level)

**Total 7 credits Total 6-7 credits**

**GRAND TOTAL: 30-31 credits** (30 credits are 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 COURSE DESCRIPTION BOOKLET: GRADE 9**

|  |  |
| --- | --- |
| **GRADE 9: Compulsory Credits** | |
|  | Credit Value |
| Canada In The Contemporary World | 1.0 |
| English Language Arts | 1.0 |
| Science | 1.0 |
| Reading is Thinking | 1.0 |
| Mathematics | 1.0 |
| Physical Education | 1.0 |
| Life-Work Exploration | 1.0 |
| Total | 7.0 credits |

|  |
| --- |
| **GRADE 9: Elective Courses** |
| **Students will select 4 elective course3 each worth a half credit.** |
| Concert Band |
| Drama |
| Electricity - Electronics Technology |
| Business Innovations |
| Exploration of Photography |
| Food and Nutrition |
| French |
| Graphic Communication Technology |
| Guitar |
| Indigenous Language and Culture |
| Pre-Engineering Part 1 - Technology Education |
| Power Mechanics Technology |
| Technical Music Production |
| Textile Arts and Design |
| Visual Art |
| Woodwork Technology |

**Additional Credits:**

|  |
| --- |
| **Note: These courses are scheduled during lunch or after regular school hours.** |
|  |
| Jazz Band |
| Musical Theatre |

**COMPULSORY CREDITS**

**INTERDISCIPLINARY APPROACH**

Students in Grade 9 will study English Language Arts, Canada in the Contemporary, Science, Career Development, and Science through an interdisciplinary project-based learning model. Students will also be enrolled in Mathematics, Physical Education and Health, and Reading is Thinking.

**English 10F (1 CREDIT)** *Prerequisite: None*

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*

Grades 9 & 10 English are designed as "core courses" with high expectations for all learners so that a solid literacy foundation is established before students move into some of the more "specialized" courses in Grade 11 & 12. Reading, writing, listening, speaking, viewing, and representing skills are the "strands" in English that comprise the common threads found in literacy.

**Social Studies: Canada in the Contemporary World 10F (1 CREDIT)** *Prerequisite: None*

The goal of this course is for students to observe, understand, and ask relevant questions to make important decisions as active citizens of a community, nation, and world. The primary focal points of the course are the geography and history of Canada. Students will examine four clusters in this course: Diversity and Pluralism, Democracy and Governance, Canada in the Global Context, and Opportunities and Challenges.

These clusters will examine the cultural makeup of Canada, and how various individuals and groups function within a diverse and pluralistic nation. They will examine how Canada is governed and what individuals and groups can do to contribute to our governance, and how we can interact as citizens of an increasingly globalized and industrialized planet. As well, the course will lead the students to understand current issues in Canadian society, and how they can be considered in planning for the nation’s future.

**Science 10F (1 CREDIT)** *Prerequisite: None*

This course provides general educational experiences in science for all students to give them a better understanding of the world around them. Students will develop and expand their knowledge and incorporate critical and analytical thinking, as well as learn and develop laboratory skills.

*Topics Include:*

*• Physics - The Nature of Electricity*

*• Biology - Reproduction*

*• Chemistry - Atoms and Elements*

*• Astronomy - Exploring the Universe*

**Career Development and Life-Work: Career Exploration (1 CREDIT)** *Prerequisite: None*

Students will also be offered opportunities to explore their passions and future careers. This course provides an opportunity to try something new or dive deeper into a subject or topic. This course often allows students an opportunity to explore different areas of study in a variety of settings with field trips both on and off school grounds, often with outside experts. These experiences are designed to help students 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 development 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.

Some themes of career development include the following:

* *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*
* *Social Justice and Action*
* *Caring for Animals*
* *Metis Beading*
* *The World of Interior Design*
* *The Fashion Industry*
* *Health, Wellness and Well Being*
* *Indigenous Culture*

**Reading is Thinking (1 CREDIT)** *Prerequisite: None*

In this course, students engage in language activities that encourage the application of diverse thinking skills, strategies, and tools. Throughout the learning process, observations are made to provide valuable insights into individual progress and understanding. Varied techniques are utilized to organize and clarify the material, tailored to different learning tasks and stages. By employing these methods across various contexts, students develop a deeper understanding of their own learning process, with opportunities to showcase their work for assessment and evaluation purposes.

**Mathematics 10F (1 CREDIT)** *Prerequisite: None*

Grade 9 Mathematics (10F) is a foundation course to prepare students for multiple pathways in Grades 10 to 12. The course builds on the understandings from Kindergarten to Grade 8 Mathematics. Math will be offered all year long.

*Topics Include:*

*• Numbers*

*• Shape and Space*

*• Statistics and Probability*

*• Patterns and Relations*

**Physical Education and Health 10F (1 CREDIT)** *Prerequisite: None*

Nelson McIntyre Collegiate students must successfully earn a full Physical Education credit in Grade 9, Grade 10, Grade 11, and Grade 12 to graduate. Students are provided with a balanced program that encompasses the knowledge, skills, and attitudes necessary for a physically active and healthy lifestyle.

Classroom Based Health Activities: relationships and human sexuality, substance use and abuse, personal values, communication, decision making and Mental Health Education.

Integrated Topics: goal setting, teamwork, fair play, sport etiquette, communication, and personal responsibility.

*Topics Include:*

* *Movement*
* *Fitness Management*
* *Safety*
* *Personal and Social Management*
* *Healthy Lifestyle Practices*

Students are requested to bring appropriate physical education attire (non-marking runners, sweats or shorts, deodorant, and a T-shirt) and are required to participate in all activities.

**ELECTIVE CREDITS (HALF CREDIT OPTIONS)**

**GRADE 9 BAND**

This course is for Grade 9 students who are interested in joining Concert Band in the future. Students will select which instrument they wish to play after some exposure to the options.

**Concert Band** *Prerequisite: None*

Students will play in a large instrumental ensemble of woodwind, brass, and percussion instruments. Students select which instrument they wish to play; some prior experience is helpful. The Concert Band plays a wide variety of music from festival and concert pieces to marches, to television and movie themes, to Broadway showstoppers and jazz – and students are always welcome to offer music suggestions! There are public performances, such as the Winter and Spring Concerts, along with festival performances and possible band trips. Rehearsals are during lunch hour every second day for the full school year, allowing students a flexible schedule for additional electives. Students are generally expected to supply their own instrument, but some school-division-owned instruments are available – please see the Music Director for details.

**Jazz Band** *Prerequisite: None*

Students become a member of the NMC Jazz Ensemble and learn to play a mixture of jazz music styles: swing, Latin, funk, jazz-rock, etc. Development of rhythmic and improvisation skills are encouraged. The Jazz Band performs regularly for a range of events around the city, as well as school concerts, festival performances and the annual Brandon Jazz Festival. Students in the Jazz Band must also be enrolled in the Concert Band Credit. Rehearsals are during the lunch hour every second day for the full school year (they alternate with Concert Band rehearsals.) Students are welcome to perform on an instrument different from their concert band selection, depending upon whether they have access to the alternate instrument or whether it may be available from the school – please see the Music Director with any questions.

**Media Design (Yearbook)** *Prerequisite: None*

This course provides students with the skills and knowledge necessary to produce high-quality images and visual designs for publication. Students will learn how to design, arrange, and manipulate text and images using common graphic design applications, including image editing and desktop publishing software. Students will assist with designing and publishing the school yearbook, including photography, image editing, page layout, and project management. In addition, students may take a lead role in projects chronicling the school year in other ways, including producing short documentary videos, creating physical photography displays, and publishing a literary journal. This course is for students with a genuine interest in photography, publishing, graphic design, or business.

**Dramatic Arts** *Prerequisite: None*

Are you interested in acting and performance but a little nervous to give it a try? Don’t worry- we’ll teach you all the steps in a safe and supportive environment. The course begins with cooperative drama exercises and then progresses to basic scene construction and improvisation and then moves to script work from popular movies, sitcoms, and serious dramas. You will gain confidence, learn group work skills, and experience public presentations. This is a great way to get you out of your desk and to meet new friends. This entry level course is the first step to Drama 40S which is accepted as a university entrance course at the U of W and the U of M.

**Electronics** *Prerequisite: None*

Electronics is intended to build student understanding of concepts through a hands-on approach.

Students will:

• *Solve basic electronic problems and relationships involving current voltage, resistance, and power*

*• Explore relationship between electricity and magnetism*

*• Safely and properly demonstrate the use of electrical test equipment and soldering equipment*

*• Understand various symbols and schematics*

*• Construct printed circuit boards, 5 to 7 projects*

*• Use active and passive components (resistors, capacitors, diodes, etc.)*

*• Demonstrate knowledge of WHMIS and MSDS*

**Family Studies** *Prerequisite: None*

Students can take the Family Studies course in Grade 9 or 10. The course explores adolescent development from the perspective of the adolescent student. Topics include building skills and knowledge in developing positive relationships to enhance personal health and wellness within the context of their own family dynamics and the community in which they live.

**Foods and Nutrition** *Prerequisite: None*

In Foods & Nutrition 10G, students explore the basics of nutrition and healthy eating. Topics emphasized include safety in the kitchen, accurate measurement, an understanding of personal eating behaviors using the Food Guide to Healthy Eating and topics of interest to adolescents. Students will participate in food preparation labs to enhance classroom theory.

**French** *Prerequisite: None*

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 four 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 environments.

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.*

CULTURE - The student will become aware of the culture of his/her community and the Francophone culture 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.

**Graphic Arts and Technology** *Prerequisite: None*

Graphic Communications 15G gives students an introductory view to a broad variety of areas in graphics related technologies. The course is divided into two main areas: technical drawing and graphic arts. Technical drawings in isometric, oblique and orthographic will be produced. The graphic arts section will explore the areas of photography, desktop publishing, airbrush art, screen-printing, and video editing.

***Students will:***

***•*** *Layout technical drawings with the correct tools and techniques using the proper dimensions and standards using manual drawing techniques.*

*• Know and relate the importance of graphic communication in everyday life.*

*• Understand the importance of visual media.*

*• Demonstrate their graphic skills in the production of real-world applications.*

**Guitar** *Prerequisite: None*

This is a beginner guitar course, involving students playing in a large guitar ensemble, as well as in small groups and solo performances. Students will learn to read music and play in classical and chordal style, covering various exercises and a variety of music. No previous guitar experience is required.

**Indigenous Language and Culture** *Prerequisite: None*

The Indigenous Language and Culture course is designed to provide students with exposure to a variety of Indigenous languages including Ojibwe, Cree, Oji-Cree, Dene, Michif, and Inuktitut. Students will observe, listen, reflect, and participate in various activities related to Indigenous languages and cultures. We will explore numerous themes with various activities taught throughout the course that will encourage and strengthen student learning/understanding of Indigenous languages and cultures. This course is made up of several units of study based on the student, the school/environment and daily life. Students will be exposed to the several languages in Manitoba with a focus on learning the Anishinaabemowin language through basic conversation, greetings, and everyday language. Students will be introduced to how the language is tied to culture through the exploration of stories, songs, and connections to place.

**Introduction to Pre-Engineering** *Prerequisite: None*

This course is designed to use Project Based Learning as the instructional model. Students will be involved in problem-solving investigations and other engaging tasks that allow them to work in groups and/or autonomously to solve problems by developing realistic products. Students will be taught all required manufacturing skills, and how to safely utilize the equipment in the lab. Projects cover one of several major technology sectors while employing an enterprise process to design, build, and market an invention or idea. No previous experience required!

Additional Information: Students should have the ability to meet deadlines and to work independently and cooperatively with others. A strong academic standing in mathematics and sciences is recommended.

*Topics include:*

*• AC/DC Power*

*• CNC Milling Technology*

*• Communication Technology*

*• Electrical Systems*

*• Engineering*

*• Manufacturing Tools*

*• Mechanical Systems & Mechanisms*

*• Pneumatics Technology*

*• Quality Control*

*• Robotics Technology*

*• Lab Safety*

**Musical Theatre & Theatre Production** *Prerequisite: None*

Nelson McIntyre Collegiate offers participation in the music theatre or theatre production 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. An option to participate on the production side (crew) is also available to students (Backstage Production).

**Photography Exploration** *Prerequisite: None*

This optional course is designed for students to explore photography. Students will learn the basic functions of a camera, as well as the introductory skills used in photographic editing. They will be introduced to the history of photography, as well as photography’s theoretical principles. They will also learn how to make the most of available light and how to control it.

**Power Mechanics** *Prerequisite: None*

Students will explore and relate the significance of auto mechanics to the needs of individuals, industry, and society, and will develop safe practices in the use of machines and processes.

*Topics Include:*

|  |  |
| --- | --- |
| * *Student Orientation and Safety* | * *Tool Identification and use* |
| * *Fasteners and Gaskets* | * *Use of manuals* |
| * *Theory of Engine Operation* | * *Lubrication Systems, Lubricants and Bearings* |
| * *Fuel/Cooling Systems* | * *Wheels, Hubs, Tires* |
| * *Basic Ignition/Electrical Systems* | * *Arc and Gas Welding* |

**Textile Arts and Design** *Prerequisite: None*

This course is a student-led course in textile arts and design. 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 modifications to commercial patterns. The emphasis of the end products is functionality i.e. students will produce products that are in direct relationship to their needs while developing their sewing skills as well as problem solving techniques.

**Visual Art** *Prerequisite: None*

This program is for the beginning as well as the accomplished artist. Students will have the opportunity to explore the creative process through a variety of art media, such as drawing media, painting, 3-D work, and digital media. An emphasis will be placed on the styles of Canadian art.

**Woodworking** *Prerequisite: None*

This course is designed to give students the opportunity to explore this field through hands-on activities. The course will introduce students to safe handling and power tool operation, design and layout, wood joinery, problem solving, gluing, fasteners, and finishing. Students will have the opportunity to design and build a project of their own upon the successful completion of all required work.

**MISCELLANEOUS COURSES**

**Community Services Student Initiated Project (SIP) (1 CREDIT only)** *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 contribute 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 can 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).

**Special Language Credits** *Prerequisite: None*

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 by the school principal for a qualified examiner to assess the student’s oral and written skills.*

Private Music Option *Prerequisite: None*

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. While these credits cannot count towards graduation, they can be earned in addition to the 30 credits necessary for graduation. Please talk to your Student Services Teacher for more detail

**GRADE 10-12 COURSE SELECTION OVERVIEW**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade 10 | | Grade 11 | | Grade 12 | |
| COMPULSORY COURSES | | COMPULSORY COURSES | | COMPULSORY COURSES | |
|  | ENGLISH LANGUAGE ARTS |  | ENGLISH COMPREHENSIVE |  | PHYSICAL EDUCATION |
|  | GEOGRAPHIC ISSUES OF THE 21st CENTURY |  | HISTORY OF CANADA |  |  |
|  | LIFE-WORK PLANNING (CAREER DEVELOPMENT) |  | PHYSICAL EDUCATION |  | **(ONE ELA/INTERDISCIPLINARY COMPULSORY)** |
|  | PHYSICAL EDUCATION |  |  |  | ELA: LITERARY FOCUS/CINEMA AS A WITNESS TO MODERN HISTORY |
|  | SCIENCE |  |  |  | ELA: COMPREHENSIVE FOCUS/GLOBAL ISSUES |
|  |  |  |  |  |  |
|  | **(ONE MATH COMPULSORY)** |  | **(ONE MATH COMPULSORY)** |  | **(ONE MATH COMPULSORY)** |
|  | ESSENTIAL MATHEMATICS |  | APPLIEDMATHEMATICS |  | APPLIED MATHEMATICS |
|  | INTRO TO APPLIED & PRE-CALCULUS MATH |  | ESSENTIAL MATHEMATICS |  | ESSENTIAL MATHEMATICS |
|  |  |  | PRE-CALCULUS MATHEMATICS |  | PRE-CALCULUS MATHEMATICS |
|  |  |  |  |  |  |
|  | ELECTIVE COURSES |  | ELECTIVE COURSES |  | ELECTIVE COURSES |
|  | Rank your electives (1-5) |  | Rank your electives (1-5) |  | Rank your electives (1-5) |
|  | DIGITAL PICTURES: YEARBOOK |  | BIOLOGY |  | APPLIED TECHNOLOGY (YEARBOOK) |
|  | DRAMATIC ARTS |  | CHEMISTRY |  | BIOLOGY |
|  | ELECTRICITY-ELECTRONICS TECHNOLOGY |  | CURRENT TOPICS IN FNMI STUDIES |  | BUSINESS MANAGEMENT |
|  | ENTREPRENEURSHIP |  | DESKTOP PUBLISHING (YEARBOOK) |  | CHEMISTRY |
|  | EXPLORATION OF PHOTOGRAPHY |  | DRAMATIC ARTS |  | CURRENT TOPICS IN FNMI STUDIES |
|  | FAMILY STUDIES |  | ELECTRICITY-ELECTRONICS TECHNOLOGY |  | DRAMATIC ARTS |
|  | FOODS & NUTRITION |  | FAMILY STUDIES |  | ELECTRICITY-ELECTRONICS TECHNOLOGY |
|  | FRENCH |  | FOODS & NUTRITION |  | FAMILY STUDIES |
|  | GRAPHIC COMMUNICATION TECHNOLOGY |  | FRENCH |  | FOODS & NUTRITION |
|  | GUITAR |  | GRAPHICS COMMUNICATION TECHNOLOGY |  | FRENCH |
|  | INDIGENOUS LANGUAGE & CULTURE |  | GUITAR |  | GRAPHICS COMMUNICATION TECHNOLOGY |
|  | POWER MECHANICS TECHNOLOGY |  | INDIGENOUS LANGUAGE & CULTURE |  | GUITAR |
|  | PRE-ENGINEERING-TECHNOLOGY ED. |  | LIFE-WORK BUILDING (CAREER DEVELOPMENT) |  | INDIGENOUS LANGUAGE & CULTURE |
|  | TECHNICAL MUSIC PRODUCTION |  | PHYSICS (COMPUTATIONAL) |  | LIFE-WORK TRANSITION (CAREER DEVELOPMENT) |
|  | TEXTILE ARTS & DESIGN |  | POWER MECHANICS TECHNOLOGY |  | PHYSICS (COMPUTATIONAL) |
|  | VISUAL ARTS |  | TEXTILE ARTS & DESIGN |  | POWER MECHANICS TECHNOLOGY |
|  | WOODWORK TECHNOLOGY |  | VENTURE DEVELOPMENT |  | TEXTILE ARTS & DESIGN |
|  |  |  | VISUAL ART |  | VISUAL ART |
|  |  |  | WOODWORK TECHNOLOGY |  | WOODWORK TECHNOLOGY |
|  |  |  |  |  |  |
|  | ADDITIONAL COURSES |  | ADDITIONAL COURSES |  | ADDITIONAL COURSES |
|  | CONCERT BAND |  | CONCERT BAND |  | CONCERT BAND |
|  | JAZZ BAND |  | JAZZ BAND |  | JAZZ BAND |
|  | MUSICAL THEATRE |  | MUSICAL THEATRE |  | MUSICAL THEATRE |
|  | THEATRE PRODUCTION (BACKSTAGE) |  | THEATRE PRODUCTION (BACKSTAGE) |  | THEATRE PRODUCTION (BACKSTAGE) |
|  |  |  |  |  |  |

**NOTE:** *Any elective courses with insufficient enrollment may be subject to cancellation.*

**NELSON McINTYRE REGISTRATION PROCESS: GRADE 10-12**

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 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 15th. 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 for 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 NMC 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 and parent information evenings in the last week of February.
* **Step 4** Schedules will be handed out on the first day of school in September.

**NELSON McINTYRE COURSE DESCRIPTION BOOKLET: GRADE 10**

**COMPULSORY CREDITS**

**INTERDISCIPLINARY APPROACH**

Students in Grade 10 will study English Language Arts, Geographic Issues of the 21st Century, Science, and Life-Work Planning through an interdisciplinary project-based learning model. Students will also be enrolled in Physical Education and Health, along with one compulsory Mathematics course.

# English 20F *Prerequisite: English 10F*

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This course develops the six basic strands of English Language Arts (listening, speaking, reading, writing, viewing, and representing).

The outcomes require the students to:

1. *Explore thoughts, ideas, feelings, and experiences.*
2. *Comprehend and respond personally and critically to oral, literary, and media texts.*
3. *Manage ideas and information.*
4. *Enhance clarity and artistry in communication.*
5. *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*

*Food from the Land*

**Science 20F** *Prerequisite: Science 10F*

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 Weather Dynamics

Chemistry in Action Motion

**Physical Education and Health 20F** *Prerequisite: Phys Ed 10F*

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 two options*)**

**Essential Mathematics 20S** *Prerequisite: Mathematics 10F*

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 pre-requisite. 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 and Life-Work: Career Planning 20F** *Prerequisite: None*

Students will also be offered opportunities to explore their passions and future careers. This course provides an opportunity to try something new or dive deeper into a subject or topic. This course often allows students an opportunity to explore different areas of study in a variety of settings with field trips both on and off school grounds, often with outside experts.

These experiences are designed to help students 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 development 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.

Some themes of career development include the following:

* *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*
* *Social Justice and Action*
* *Caring for Animals*
* *Metis Beading*
* *The World of Interior Design*
* *The Fashion Industry*
* *Health, Wellness and Well Being*
* *Indigenous Culture*

**ELECTIVE CREDITS**

**Textile Arts and Design 25G** *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 modifications 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, self-expression, 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 storylines, 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)** *Prerequisite: None*

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 and 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, critical thinking, communication, character development, and problem solving. This course will be offered with staggered opportunities throughout the full year with various options 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.*

1. 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.
2. LANGUAGE – The student will understand and use orally and in writing, the structures and vocabulary related to the fields of experience.

**Graphic Arts 25G** *Prerequisite: None*

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 techniques will be performed. Video editing using non-linear editing software on the computer will be introduced

**Indigenous Language and Culture** *Prerequisite: None*

The Indigenous Language and Culture course is designed to provide students with exposure to a variety of Indigenous languages including Ojibwe, Cree, Oji-Cree, Dene, Michif, and Inuktitut. Students will observe, listen, reflect, and participate in various activities related to Indigenous languages and cultures. We will explore numerous themes with various activities taught throughout the course that will encourage and strengthen student learning/understanding of Indigenous languages and cultures. This course is made up of several units of study based on the student, the school/environment and daily life. Students will be exposed to the several languages in Manitoba with a focus on learning the Anishinaabemowin language through basic conversation, greetings, and everyday language. Students will be introduced to how the language is tied to culture through the exploration of stories, songs, and connections to place.

**Power Mechanics 25G** *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** *Prerequisite: Visual Art 10S*

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 on 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 several 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 several 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 to enroll in the jazz band credit.

**NELSON McINTYRE COURSE DESCRIPTION BOOKLET: GRADE 11**

**SEMESTER SYSTEM**

For Grade 11 and 12s, 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 English Language Arts and The History of Canada 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 French-English Duality*

*Identity, Diversity, and Citizenship Canada and the World*

*Governance and Economics*

**PHYSICAL EDUCATION**

students are requested to bring appropriate physical education attire (non-marking runners, sweats or shorts, and a T-shirt) and are required to 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 30FS – Active Healthy Lifestyles** *Prerequisite: Physical Education 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 and Life Work: Career Planning 30S** *Prerequisite: None*

Students will also be offered opportunities to explore their passions and future careers through Career Development: Life-Work Building.

Students will also be offered opportunities to explore their passions and future careers. This course provides an opportunity to try something new or dive deeper into a subject or topic. This course often allows students an opportunity to explore different areas of study in a variety of settings with field trips both on and off school grounds, often with outside experts.

These experiences are designed to help students 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 development is designed to help students gain 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.

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

**Essential Mathematics 30S** *Prerequisite: Essential Mathematics 20S*

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 Algebra and Number (absolute value radicals, rational expressions)*

*(Quadratic Equations) Reciprocal Functions*

*Equation Systems Trigonometry*

*Inequalities Polynomials*

**PICK YOUR PATH: GRADE 11**

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 (a project-based learning interdisciplinary approach - 3 credits)
3. ATC - Louis Riel Arts and Technology Centre (4 credits) - For a full list of courses, please click [here](https://lrsdcdn-my.sharepoint.com/:b:/g/personal/thadd_bourass_lrsd_net/Efsp_qz3yRBJnyZuQ2HIYtIBFw49vo1uZEtS_Yz-bcJVDA?e=WZwtwG).

**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.

**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 Blood and Immunity

Digestion and Nutrition Excretion

Control Mechanisms Gas Exchange

Circulation

**Chemistry 30S** *Prerequisite: Science 20F*

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 Stoichiometry*

*Molecular Weights Organic Chemistry*

*Moles Kinetic Molecular Theory*

*Molar Volume Percent Composition*

*Density Empirical Formula*

*Naming of Compounds Gases and Pressure*

*Balancing Equations Volume and Temperature*

*Precipitation Ionic Equations*

**Computational Physics** *Prerequisite: Science 20F*

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

**DRAMA**

**Dramatic Arts (1A) DA30S** *Prerequisite: None*

This course is a continuation of the 25S course currently being offered. Students in both the 30S and 40S classes 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) *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 in the production side (crew) is also available to students (backstage production).

**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 and 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 several 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).

**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 several 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 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.)

**Indigenous Language and Culture** *Prerequisite: None*

The Indigenous Language and Culture course is designed to provide students with exposure to a variety of Indigenous languages including Ojibwe, Cree, Oji-Cree, Dene, Michif, and Inuktitut. Students will observe, listen, reflect, and participate in various activities related to Indigenous languages and cultures. We will explore numerous themes with various activities taught throughout the course that will encourage and strengthen student learning/understanding of Indigenous languages and cultures. This course is made up of several units of study based on the student, the school/environment and daily life. Students will be exposed to the several languages in Manitoba with a focus on learning the Anishinaabemowin language through basic conversation, greetings, and everyday language. Students will be introduced to how the language is tied to culture through the exploration of stories, songs, and connections to place.

**VISUAL ARTS**

**Visual Art (1A) VA30S** *Prerequisite: None*

The 40S program will focus on the development of studio and portfolio practice. A keen interest in the practice of artmaking 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** *Prerequisite: None*

This course promotes the development of personal health by exploring the psychology of food choices and provides the opportunity for self-assessment 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*

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 and 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 Include:*

*Student Orientation and Safety Electrical Systems*

*Automatic Transmissions Exhaust Systems*

*Emission Controls Engine Rebuilding*

*Heating and Air Conditioning Arc and Gas Welding*

**Woodworking 30G** *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 every other year for Grade 11 and 12 students Prerequisite: 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 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 Human Sexuality*

*Social and Cultural Behaviors Health and Coping*

*Thinking and Intelligence Psychological Disorders*

*Sensation and Perception Personality Theory*

*Memory Emotion*

**PROPEL - PROJECT PURSUIT & EXPLORATION LEARNING: GRADE 11**

Propel is an award-winning, interdisciplinary, project-based learning environment where students earn 4 credits while pursuing individualized areas of interest. The program takes place for one semester at Nelson McIntyre Collegiate and incorporates the following credits: English, Information and Communication Technology, Career Development, and Physical Education.

Through the Propel Program, students will get:

·       *Flexibility in work hours - there is no set schedule of classes as the work is interdisciplinary*

·       *Creative workspaces - we have industry standard tools and explicitly teach both collaboration and feedback*

·       *Individualized self-directed learning, developing time-management and project management skills along the way*

Propel approaches learning through a 21st 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*

·       *Creative problem solving*

·       *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 have one of two options through an interdisciplinary project-based learning model. Students will select one of the following options: ELA: Literacy Focus + Cinema as a Witness to Modern History or ELA: Comprehensive Focus + Global Issues.

**English Language Arts 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. For a full description of ELA Literary versus ELA Comprehensive, please click [here](https://www.edu.gov.mb.ca/k12/cur/ela/docs/s4_framework/s4_fulldoc.pdf).

**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 several 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**

s*tudents 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 40S – 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 and Life-Work Career Transitioning 40S**

Students will also be offered opportunities to explore their passions and future careers. This course provides an opportunity to try something new or dive deeper into a subject or topic. This course often allows students an opportunity to explore different areas of study in a variety of settings with field trips both on and off school grounds, often with outside experts.

These experiences are designed to help students 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 development 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.

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

**Essential Mathematics 40S** *Prerequisite: Essentials Math 30S*

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:

1. Investigate mathematical situations and present results using mathematical language
2. 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

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: GRADE 12**

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) - For a full list of courses, please click [here](https://lrsdcdn-my.sharepoint.com/:b:/g/personal/thadd_bourass_lrsd_net/Efsp_qz3yRBJnyZuQ2HIYtIBFw49vo1uZEtS_Yz-bcJVDA?e=WZwtwG).

**PROPEL - PROJECT PURSUIT & EXPLORATION LEARNING: GRADE 12**

Propel is an award-winning, interdisciplinary, project-based learning environment where students earn 4 credits while pursuing individualized areas of interest. The program takes place for one semester at Nelson McIntyre Collegiate and incorporates the following credits: English, Information and Communication Technology, Career Development, and Physical Education.

Through the Propel Program, students will get:

·       *Flexibility in work hours - there is no set schedule of classes as the work is interdisciplinary*

·       *Creative workspaces - we have industry standard tools and explicitly teach both collaboration and feedback*

·       *Individualized self-directed learning, developing time-management and project management skills along the way*

Propel approaches learning through a 21st 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*

·       *Creative problem solving*

·       *Build partnerships and collaborate with others*

·       *Gain meaningful employment and/or make connections in the professional world*

·       *Succeed in post-secondary education*

**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.

# 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 mathematics, 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 PH, Hydrolysis, Acid/Base Reactions and Titration*

*Chemical Equilibrium Oxidation-Reduction Reactions*

*Solutions-Ionic & Molecular KSP & Solubility*

*Atomic Structure Periodic Trends*

*Electrochemical Cells Electrolytic Cells*

**Physics 40S** *Prerequisite: Physics 30S*

Students who choose this course should have completed Physics 30S, and Math Pre-Calculus 30S or Applied Math 30S is also highly recommended. Physics 40S 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 Modern Physics*

*Mechanics Fields*

**DRAMA**

**Dramatic Arts (1A) DA40S** *Prerequisite: None*

This course is a continuation of the 25S course currently being offered. Students in both the 30S and 40S classes 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 in the production side (crew) is also available to students (backstage production).

**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 several 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 to enroll in the jazz band credit.

**Guitar (3A) GU40S** *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) 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 artmaking 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 modifications 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** *Prerequisite: None*

Electronics 40S 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:*

*Solve electronics related problems Research topics in electronic*

*Robotics/microcontrollers Project design and testing*

*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 interest 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** *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 Advanced Wood Joints*

**THE HUMANITIES**

**Current Topics in First Nations, Métis, and Inuit Studies**

**\****Offered every other year for Grade 11 and 12 students Prerequisite: 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.* 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 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, lectures, 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 Human Sexuality*

*Social and Cultural Behaviors Health and Coping*

*Thinking and Intelligence Psychological Disorders*

*Sensation and Perception Personality Theory*

*Memory 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 contribute 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 can 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 APPRECIATION 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 by 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**

**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-to-face classroom environment. 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 **WebCT** 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 always available on the Internet. Students will have a school contact teacher to facilitate communication and provide additional support.

Some course previews can be found here: <https://www.informnet.mb.ca/>

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 12. Students must have completed 22 high school credits (maintaining a 70% academic average), completed at least one 40S credit in either English or Pre-Calculus Mathematics, or in consultation with/or at the school’s discretion.

**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

**Where will courses be offered?**

* Dakota Collegiate
* Glenlawn Collegiate

\*these courses are subject to timetable compatibility.