



Nelson McIntyre Collegiate
Grade 10, 11 & 12
Course Selection Book 2016-2017

Nelson McIntyre Course Description Booklet Grades 10-12

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.

It is possible for a student to take up to five full courses during each of the two semesters. Nelson McIntyre Collegiate offers ten slots of scheduled class time for students during the course of the school year. A student wishing to take more than the recommended number of courses for his/her grade level, must complete and submit a "Request to take Extra Credit" form into the office.

Student Assessment

"Assessment serves different purposes at different times; it may be used to find out what students already know and can do; it may be used to help students improve their learning; or it may be used to let students and their parents know how much they have learned within a prescribed period of time." – Damian Cooper, Talk About Assessment: Strategies and Tools to Improve Learning

Students are evaluated continuously throughout each of the two semesters. Evaluations include assignments, tests and quizzes, essays, projects, as well as other methods of assessment. In most courses, students will write final exams at the end of each semester. Students enrolled in all year (or non-semester) courses will write these exams in June. The value of school based exams, established by school division policy, are worth between 15% and 30% of the final grade. All divisional policy regarding assessment and examinations will be followed.

When an exam is not to be written in specific courses, their subject teacher will inform students at the beginning of the program. In the 2016-2017 school year Provincial Exams will be written in Grade 12 Mathematics and Grade 12 English.

Interim Reports will be sent home after the first six weeks of school for all grade 9 students. Students in grades 10, 11 & 12 will have an Interim Report sent home if the subject teacher is concerned about a students' progress in the course. A report card will be sent home at the mid and end points of each semester. Parent-Teacher conferences will be held in conjunction with mid semester reports.



NELSON McINTYRE COLLEGIATE GRADUATION REQUIREMENTS

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

Grade 9

English Language Arts	1 credit
Mathematics	1 credit
Science	1 credit
Canada/World	1 credit
Physical Education	1 credit

Plus 3 electives

Total **8 credits**

Grade 10

English Language Arts	1 credit
Mathematics	1 credit
Science	1 credit
Geography	1 credit
Physical Education	1 credit

Plus 3 electives

Total **8 credits**

Grade 11

English Language Arts	1 credit
Mathematics	1 credit
History	1 credit
Physical Education	1 credit

Plus 3 electives

Total **7 credits**

Grade 12

English Language Arts	1 credit
Mathematics	1 credit
Physical Education	1 credit

Plus 2 Grade 12 electives

Plus 2 additional electives

(At any level)

Total **7 credits**

GRAND TOTAL: **30 credits**

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

NELSON McINTYRE REGISTRATION PROCESS

The following outlines the steps and timelines that have been established for the registration of students at Nelson McIntyre Collegiate.

Students and parents are encouraged to obtain as much information as possible and work with their Teachers and Student Services Teachers in order to select programs and courses that will be both challenging and attainable for each student.

February and March of the Registration Year

1. Nelson McIntyre Student Services Teachers hold meetings to discuss registration and distribute Registration forms and Course Outline Books.
2. Registration forms must be completed, signed by a parent/guardian, and submitted by **March 4th, 2016.**

April of the Registration Year

Course verification forms will be sent home to parents/guardians and must be checked to ensure accuracy. This form lists the courses selected by the student. It is not a guarantee that the students will be registered in each course. Actual course registration is dependent on a variety of factors being determined during the next 2 months.

August of the Registration Year

“School Opening” letters will be mailed to students in late **August.**

***Any course conflicts, that are a result of timetable restrictions, will be dealt with **through appointments** as detailed in the August letters.

Important Steps for Registration:

- **Step 1** Student Services Teachers will visit classrooms to explain the registration process. Participate in the Grade Level meetings at school to view grade & course requirements and to ask important questions. Review this Course Selection handbook
- **Step 2** Use the worksheet found in the Course Description Booklet to plan your
 - Compulsory Courses
 - Elective Courses
 - Alternative Options Courses
- **Step 3** Attend Registration Day session with Student Services Teachers to register for 2016 - 2017.
- **Step 4** Schedules will be handed out on the first day of school.

COMPULSORY CREDITS

THE LANGUAGES

English Language Arts 20F

Grade 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.

English 30S

ELA 20F is a prerequisite for ELA 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

English 40S Courses – Please see chart on following page

Prerequisite – English 30S

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

Prerequisite – EAL 31G

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

Topics Include:

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

**1st Credit
Compulsory**

**COMPREHENSIVE
FOCUS 40S**



Comprehensive includes a balance of language experiences in transactional and literary modes of expression. Simply put, transactional language is more functional and practical, the kind used to conduct business in the daily workplace or to communicate factual information, while literary language is more creative or imaginative, the kind used to express emotions and thoughts in an artistic way or to evoke the world of fiction. Students should learn to vary their writing styles to meet the demands of changing situations.

The final exam is the provincial standards exam worth 30%.

**2nd Credit
Elective**

**LANGUAGE & TRANSACTIONAL
FORMS
40S**



Students will learn skills using language as we see it in everyday life and business. Forms of writing may include research reports, interviews, speeches, memos, proposals, newspapers, magazines to name a few. This course will comprise of a major group project and a major individual one.

This course may not be used as the compulsory English for graduation.

This course is designed for students interested in further study in the areas of Engineering, Science, Medicine, Management/Business, Law, Journalism, Marketing/Publicity etc...

THE HUMANITIES

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
Natural Resources
Food from the Land

Industry and Trade
Urban Places

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-contract to the present. Through this process students think historically and acquire enduring understandings related to the following five themes in Canadian history.

Topics Include:

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

French-English Duality
Canada and the World

SCIENCE

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
Chemistry in Action
Weather Dynamics

Dynamic of Ecosystems
Motion

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

Physical Education 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.

Physical Education 30FS - Active Healthy Lifestyles

Prerequisite - Phys Ed 20F

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles into their futures. Students will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport. The focus of this content will be on health and personal planning. Students will also be introduced to safety and risk management planning. Students will be graded for completion of the course with a CO (complete) or IN (incomplete) designation.

Physical Education 30FS – Female Fitness

Prerequisite - Phys Ed 20F

This class can be used to complete the compulsory physical education credit. The class will be female only and students enrolled will be exposed to a wide variety of different activities to promote lifelong physical activity. Activities will include, but not be limited to, strength training, cardiovascular training, zumba, hot yoga, jump fitness, and aerobics. Female-specific health lessons will also be incorporated to the health curriculum.

Physical Education 40FS - Active Healthy Lifestyles

Prerequisite Phys. Ed 30FS

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, social/emotional health, and personal development. The focus of this content will be on health and personal planning. Students will also be introduced to safety and risk management. As part of earning a credit for this course, students will be required to submit a personal fitness portfolio containing elements such as a fitness plan, physical activity log, or journal entries. Students will be graded for completion of the course with a CO (complete) or IN (incomplete) designation.

Physical Education 40FS – Female Fitness

Prerequisite - Phys Ed 30FS

This class can be used to complete the compulsory physical education credit. The class will be female only and students enrolled will be exposed to a wide variety of different activities to promote lifelong physical activity. Activities will include, but not be limited to, strength training, cardiovascular training, zumba, hot yoga, jump fitness, and aerobics. Female-specific health lessons will also be incorporated to the health curriculum.

MATHEMATICS

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
Personal Finance	Consumer Decisions
Measurement	Transformations
2-D Geometry	Angle Construction

Introduction to Applied and Pre-Calculus Mathematics 20S

Prerequisite – Mathematics 10F (Recommended mark of 60%)

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

The topics studied form the foundation for topics to be studied in both Grade 11 Applied Mathematics and Grade 11 Pre-calculus Mathematics.

Components of the curriculum are both context driven and algebraic in nature. Students will engage in experiments and activities that include the use of technology, problem solving, mental mathematics, and theoretical mathematics to promote the development of mathematical skills. These experiences will provide opportunities for students to make connections between symbolic mathematical ideas and the world around us.

Topics Include:

Linear Modeling	Graphs and Relations
Number Sense	Linear Measurement
Algebra	Relations and Functions
Coordinate Geometry	Polynomials
Trigonometry	Surface Area and Volume
Applications of Linear Functions	Systems

Each student will be required to purchase a Texas Instrument Calculator, a TI-83 Plus or TI-84 calculator. We will do a number of units where it is essential to have this calculator. Casio or any other brand will not be compatible with the textbook, so please do not purchase these types of graphing calculators.

GRADE 11 - 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 Intro. To Applied & Pre-Cal Math. A mark of 65% is recommended.	Prerequisite is Grade 10 Intro. To Applied & Pre-Cal 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

Applied Mathematics 30S*Prerequisite – Introduction to Applied and Pre-Calculus 20S*

Grade 11 Applied Mathematics (30S) is intended for students considering post-secondary studies that do not require a study of theoretical calculus. It is context driven and promotes the learning of numerical and geometrical problem-solving techniques as they relate to the world around us. It builds upon the foundation knowledge and skills from Grade 10 Introduction to Applied and Pre-Calculus Mathematics and builds a foundation for Grade 12 Applied Mathematics.

Topics include:

Measurement	Statistics
Geometry	Relations and Functions
Logical Reasoning	Mathematics Research Project

Pre-Calculus Mathematics 30S*Prerequisite – Introduction to Applied and Pre-Calculus 20S*

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

Topics Include:

Relations and Functions (Quadratic Equations)	Algebra and Number (absolute value radicals, rational expressions)
Equation Systems	Trigonometry
Inequalities	Polynomials
Reciprocal Functions.	

Applied Mathematics 40S

Prerequisite – Applied Mathematics 30S

The goals of Grade 12 Applied Mathematics are to ensure that students:

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

Topics Include:

Matrices

Statistical Analysis

Sequences

Vectors

Design and Measurement

Periodic Functions

Personal Finance

Probability

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

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 should 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

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

Transformations

Conics

Exponents and Logarithms

Trigonometric Identities

Probability

PROPEL—PROJECT BASED LEARNING (GR. 11)

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

- Transactional English 30S
- Information and Communication Technology (ICT) 30S
- Physical Education 30S
- One other possible credit depending on the topic and depth of study

Through the Propel Program, students will get

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

Propel approaches learning through a 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
- Problem solve creatively
- Build partnerships and collaborate with others
- Gain meaningful employment and/or make connections in the professional world
- Succeed in post-secondary education



ECHO—ABORIGINAL PERSPECTIVES

Echo is a program for Grade 9 and 10 students where students will earn the core subject area credits with the guidance of an Aboriginal teacher and through the lens of Aboriginal perspectives. Students in the program benefit from the following:

- The same teacher for their core subjects (English Language Arts, Science, Social Studies, and Math)
- An increased sense of belonging and community
- Enriched student learning and engagement through traditional Aboriginal teachings, support, and opportunities
- Support a successful transition to High School

Students should consider ECHO if they value:

- An Aboriginal perspective to enrich the classroom experience
- A supportive relationship with an Aboriginal teacher
- A smaller classroom that emphasizes relationship, community, acceptance, connection, and opportunities
- A strength based program that helps students find their gifts and greater understand their heritage



ELECTIVE CREDITS

THE LANGUAGES

French 20F, 30S, 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.
5. **GENERAL LANGUAGE EDUCATION** – The student will demonstrate awareness of the characteristics of language and culture.

THE SCIENCES

Biology 30S

Prerequisite – Science 20F

Students in Biology 30S will study the Human Body with respect to homeostasis, digestion and nutrition, the respiratory system, excretion and waste management, and concluding with the immune and nervous system.

Topics Include:

Wellness and Homeostasis
Digestion and Nutrition
Control Mechanisms
Circulation

Blood and Immunity
Excretion
Gas Exchange

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

What is Heredity
Human Genetics
Molecular Basis for Inheritance

Fundamentals of Heredity
Genetic Engineering
Bioethics

Biodiversity

Organizing Biodiversity
Evolutionary Theory
The Plant Kingdom

Accounting for Diversity
Viruses, Monerans, Protists, Fungi
The Animal Kingdom

Ecology

The Ecosystem
Community Interactions
Human Impact

Biomes in the Biosphere
Population Ecology
Field Research

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
Molecular Weights
Moles
Molar Volume
Density
Naming of Compounds
Balancing Equations
Precipitation

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

Chemistry 40S

Prerequisite – Chemistry 30S

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

Topics Include:

Reaction Kinetics	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 30S

Prerequisite - Science 20F

Introduction to Applied & Pre-Calculus math is highly recommended if students are choosing this course. You can't fully enjoy a game unless you know its rules. Whether it's a ball game, computer game, or party game - if you don't know the rules, it can be boring. Just as a musician hears what untrained ears can't, and just as a cook tastes in food what others miss, a person who knows nature's rules can better appreciate nature. Learning that satellites follow the same rules as tossed baseballs changes the way you see orbiting astronauts on TV. Learning the rules of light changes the way you see blue skies, white clouds, and rainbows. Richness in life is not only seeing the world with wide open eyes, but knowing what to look for. In this course we will begin to look at some of nature's basic rules—physics.

Topics Include:

Waves	The Nature of Science
Mechanics	Fields

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

ARTS EDUCATION

Drama

Dramatic Arts (1A) DA20S

The goals of Drama 20S 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 story-lines, seeing, listening, speaking, and analyzing scripts and principles of design for the stage. Drama 20S 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.

Dramatic Arts (1A) DA30S/40S

Prerequisite – Drama 20S/30S

This course is a continuation of the 20S course currently being offered. Students in both the 30S and 40S class will be taught together. Students enrolled in Drama 30S will be involved in directing assignments, and 40S students will be issued directing and script writing assignments.

Musical Theater (3A) 20S/30S/40S (1 credit)

Prerequisite - none

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

Dance (1A) DA20S/30S/40S

Prerequisite - none

This class will be an arts elective offered to students in grade 9 through 12. The class will be focused around hip hop, with a possible opportunity to enter a performance in the Manitoba Dance Festival. Students will be exposed to a variety of different types of hip hop, as well as learning dances from different cultures. There will also be the opportunity for students to learn how to choreograph dances for themselves and their peers.

Music

Concert Band (1A) CB20S/30S/40S

Students experience and learn about music through participation in the NMC Concert Band. Students perform a wide variety of music selections, addressing instrumental development, music language, knowledge, interpretation, understanding and appreciation of music. The course requires students to participate in a number of group performance opportunities throughout the school year, including a 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) JB20S/30S/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 a 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 Band 10G/20G/30S/40S in order to enroll in the jazz band credit.

Guitar (3A) GU20S/30S/40S

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) VA20S

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.

Visual Art (1A) VA30S

Prerequisite – Visual Art 20S

This course will emphasize the further development of the artistic inquiry process and creative problem solving. Students will connect the visual arts to contexts of time, place and community, and develop understanding of how art reflects and influences culture and identity. Students will explore a variety of art media and a variety of art styles.

Visual Art (1A) VA40S

Prerequisite – Visual Art 30S

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

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

CAREER DEVELOPMENT

Life/Work Building 30S, Life/Work Transition 40S

These courses are developed so that students can study and demonstrate their learning in the area of interest/talent/skill, whether it is in:

- Science/Technology
- Music/Dance/Theatre/Design
- Environmental Studies/Business

The teachers facilitate multi-age grouping, project-based learning, and cross-curricular study, and encourage students to seek out their passion and to demonstrate their understanding of what they have experienced. The course will be comprised of five major projects and art journal work. A written proposal for each project will be expected as well as exploration of a variety of art media.

PRACTICAL ARTS

HUMAN ECOLOGY

All Human Ecology courses are worth 1 credit. There are no prerequisites for any Human Ecology courses. The Provincial curriculum allows for much flexibility and is designed to be co-educational, non-sequential and requires no prerequisite courses. All courses are open to any Grades 10, 11 and 12 students. All 40S Human Ecology courses are now accepted for entrance as a 40S equivalent at the University of Manitoba. Family Studies 40S is only accepted by the University of Winnipeg.

Clothing/Housing/Design 20G

Prerequisite – None

Primarily a “hands-on” approach to clothing and textiles aimed at recognizing the influences on design and fashion, and how one's needs, preferences, values and goals affect **clothing** and **housing** choices. Within the framework of specific requirements, students will be able to choose their own practical projects in the area of greatest interest - clothing construction, or creating projects for the home.

Clothing/Housing/Design 30G

Prerequisite – None

Students will expand their construction skills in using fabric and accessories when constructing their practical projects. Students will examine the world of textile fabrics. Using an experimental approach, they will discover fabric qualities and design elements that ensure wise choices in clothing, household, and industry related textile purchase. Students will identify the significance of modern technology on the clothing and textiles industry and apply consumer knowledge when selecting fabric products.

Clothing/Housing/Design 40S

Prerequisite - None

Students explore the workings of the garment industry and the glamorous world of fashion designers. They take on the role of designer and try their hand at fashion illustration. Practical projects will reflect the ability to problem solve as all projects are selected by the students. Students will be required to be self-motivated and will assume responsibility for planning, initiating and evaluating their own project choices.

Equipment/Personal Supplies for all Clothing/Housing/Design courses:

Students will be expected to purchase their own patterns, fabric and corresponding notions. Thread and other small equipment will be supplied.

Family Studies 20G

Prerequisite – None

Do you enjoy children? Have you thought about working with children as a career? Learn about children’s development from conception until three years of age. Topics include family, parenting, prenatal development, teen pregnancy and STI’s, the birth process, as well as growth and behavior of infants and toddlers. Current media will supplement the course textbook.

Family Studies students may assist in the school based preschool and community based programs and have the opportunity to “parent” our electronic infant simulators and wear the empathy belly.

Family Studies 30S (Child Studies)

Prerequisite – None

Why do children behave as they do? This course is a study of the growth and development of children, with emphasis on preschoolers. Classroom learning includes research and media information relating to topics and issues such as child abuse, language development, learning challenges, gender stereotyping, emotional loss, street proofing, children's play, television and Internet predators.

In addition, preschool and community based programs will provide students experience in observing, planning and carrying out activities with preschoolers each week.

Family Studies 40S (Relationships and Personal Development)

Prerequisite - None

This level of Family Studies focuses on issues of personal development relevant to every individual – self-esteem, personality, value systems, making career and marriage decisions, dealing with stress and conflict, coping with divorce, and facing old age with foresight and optimism. Students will gain insight into how individuals behave the way they do - a course that makes you grow as an individual.

Special Notes: Students who choose the 40S option will be required to complete a research paper.

Foods and Nutrition 20G

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.

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.

Special Notes: Students who choose the 30S option will be required to complete additional course work.

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 20G

Prerequisite – None

Electronics 20G 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

Projects Include: 2 ampere battery charger, color organ, strobe light, and voltmeter.

Electronics 30G

Prerequisite – None

Topics Include:

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

Topics Include:

Digital electronics, integrated circuits, logic, clocks, timers, counting circuits.

Residential wiring practice

Computer assisted design and testing.

Projects include: Sound activated switch, directional microphone

Electronics 40S

Prerequisite – None

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 20G

Prerequisite – None

Graphic Communications 20G builds upon the introductory knowledge of Graphic Communications 15G. The graphic arts section will incorporate the idea of visual media in our everyday lives. Skills in desktop publishing, including page layout, image manipulation and illustration, will be developed. Black & white photography and darkroom techniques will be developed. Screen-printing using techniques will be performed. Video editing using non-linear editing software on the computer will be introduced.

Graphic Arts 30G

Prerequisite – None

Graphic Communications 30G builds upon the knowledge of Graphic Communications 20G. *The graphic arts section will continue with the graphics sells theme.* 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.

Graphic Arts 40S

Prerequisite – None

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

Power Mechanics 20G

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

Power Mechanics 30S*Prerequisite – None*

This course is designed to increase the student's awareness and understanding of various automotive practices and processes. To enable the student to perform various repairs and maintenance functions on various automotive systems and to continue the development of safe practices.

Topics Includes:

Student Orientation and Safety	Electrical Systems
Automatic Transmissions	Exhaust Systems
Emission Controls	Engine Rebuilding
Heating and Air Conditioning	Arc and Gas Welding

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 20G*Prerequisite - None*

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

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.

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 develop creative potential in both vocational and avocational life
- To promote awareness of the role played by technology in a modern world
- To assist in the selection of a career choice and career plan
- 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 enhance student self-understanding
- To develop teamwork attitudes and skills
- To enable students to acquire an appreciation for decision making and problem solving techniques.

Topics Include:

Student Orientation and Safety
Processed Materials

Power Tools/Operations – Advanced CAD
Advanced Wood Joints

THE HUMANITIES

Current Topics in First Nations, Métis and Inuit Studies:

Prerequisites - None

A Foundation for Implementation 40S

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

Prerequisite - None

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

Topics Include:

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

Human Sexuality
Health and Coping
Psychological Disorders
Personality Theory
Emotion

Assessment comprises three facets: online testing with reference support, in-class paper tests and presentations.

Introduction to Early Childhood Development 21G

By Application

This is a school-initiated course. The aim of the course is to provide students with the basic skills needed to foster positive growth and development of children at the toddler age (12 – 24 months). Students will work one on one with toddlers in NMC's child development lab. This course is available to those students interested in working with young children. Reliable attendance is a must. An application must be completed and is available from Student Services or the Child Development Lab Coordinator.

Applied Early Childhood Education 31G

By Application

This is a school-initiated course. The aim of this course is to apply skills learned in Introduction to Early Childhood Development 21G and learn more specific skills to foster positive growth and development for infants (3 – 12 months). Students will be interacting directly with the 3 – 12 month old babies in NMC's child development lab. An application must be completed and is available from Student Services or the Child Development Lab Coordinator.

Early Childhood Education and Parenting 41G

By Application

This is a school-initiated course. The aim of this course is to provide students and teen parents with the skills to foster positive growth and development for children prenatal to preschool age. An application must be completed and is available from Student Services or the Child Development Lab Coordinator.

MISCELLANEOUS COURSES

Community Service Student Initiated Project (CSSIP)

Prerequisite - None

Volunteering is one of the greatest natural resources and is essential to a healthy community. Community Service can be an enriching experience, as it becomes a learning opportunity blending volunteering and learning goals that become mutually beneficial. Students involved in service learning can make lasting and significant contributions to their community while enhancing their education and expanding their life experiences. Volunteering fosters personal development in the areas of self-image, social sensitivity, teamwork skills, civic knowledge and responsibility, career exploration and critical thinking as well as emphasizing skills and attitudes necessary for responsible citizenship.

The Community Service Student Initiated Project (SIP) Credit Option enables those students who make a contribution to their community by volunteering for approved causes or organizations, to receive recognition for the civic skills, knowledge, and attitudes obtained in the volunteer activity. By providing a Community Service Student-Initiated Project (SIP), students have the opportunity to obtain credit for a private activity in a pre-approved placement for which they may receive either .5 credit (55 hours minimum) or 1.0 (110 hours minimum).

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

Cultural Exploration Student-Initiated Project (CESIP)

Prerequisite - None

Students can gain valuable educational experience by enhancing their knowledge of their own cultural origins or a cultural group that interests them through interaction with community members such as elders and members of cultural organizations. The skills, knowledge and attitudes obtained from such activities can increase a student's self-esteem and maturity, strengthen cultural identity and/or provide greater intercultural understanding and an appreciation of cultural diversity.

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

Online Courses - (2016 – 2017)

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. Past experience indicates that to be successful, you should possess the following characteristics:

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

How Does an Online Course Work?

An online course delivery tool called *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 available on the Internet at all times. Students will have a school contact teacher to facilitate communication and provide additional support.

Some course previews can be found at: <http://webct.merlin.mb.ca/webct/entryPageIns.dowebct>

Login with "**demo**" for both user name and password.

Online Courses offered in 2016 – 2017

<ul style="list-style-type: none">• Accounting 30S• Advanced Placement Calculus 42S• Advanced Placement World History 42S (Sept. to May)• Applied Mathematics 30S• Applied Mathematics 40S• Essential Mathematics 30S	<ul style="list-style-type: none">• Essential Mathematics 40S• Physics 30S• Physics 40S• Physical Education 30S• Physical Education 40S	<ul style="list-style-type: none">• Biology 40S• English Comprehensive Focus 30S• English Comprehensive Focus 40S• English Transactional Focus 40S• History 30F
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Fast Forward – Post Secondary Today!

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

Fast Forward courses will:

- Follow Canadian university or college curriculum
- Be taught by university or college accredited professors/instructors
- Be recognized by Canadian universities and colleges

When can students begin Fast Forward courses?

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

When are courses offered in 2016/17?

First & Second semester (September to June)

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
- Psychology
- Computer Programming
- English
- Intro to Kinesiology
- Accounting
- Indigenous Studies
- Project Management



2016/2017

The **Arts & Technology Centre** is an extension of the Louis Riel School Division high schools for grade 11 & 12 students. Students who choose ATC as part of their high school studies take the majority of their grade 11 & 12 elective courses at ATC and their compulsory courses at their home school. Students typically attend ATC for one semester in grade 11 for Part 1 of a program and then may return for another semester, in grade 12, to take Part 2 of their program. Talk to your counsellor about other possible patterns.

Students register at their home school, allowing them to participate in school events and extra-curricular activities including sports, music, and student government. Students graduate with their classmates at their home school. In addition to their regular high school diploma and an ATC certificate, students in most programs earn a Technology Education high school diploma. Students may also choose to complete all or part of a program following high school graduation (no tuition fees for the first 4 credits after graduation).

ATC students who hold evening or summer jobs may be eligible to obtain high school credits towards graduation and time credit towards continued apprenticeship training by applying for the High School Apprenticeship Program.

Students are encouraged to bring and use their own electronic devices. Students are encouraged to participate in intramural activities available at lunch time through our open gym program as well as the student advisory committee (student government).

See your guidance counsellor to include ATC courses as part of your grade 11 and 12 or post-secondary plans.

ATC PROGRAMS

Courses: To assist with scheduling, ATC students can enroll in an online academic course while at ATC. There are five class periods in a day at ATC and most programs require four periods with the exception of the following programs: Building Trades, Hairstyling, and Part 2 of Esthetics. Academic courses are scheduled into the remaining period and include:

- English Comprehensive Focus 30S/40S
- Essential Mathematics 30S/40S

- English Transactional Focus 40S
- History 30F
- Accounting 30S
- Physics 30S/40S
- Applied Mathematics 30S/40S
- Pre-Calculus 30S
- Calculus 42S & World History 42S (AP)
- Physical Education 30F/40F

Administrative Assistant: Designed for students with strong personal interest in Microsoft Office applications and office practices and to prepare students for employment in clerical and administrative assistant positions.

- **Skills** – accounting, word processing, spreadsheets, databases, multimedia presentations, management fundamentals and office procedures & protocols
- **Features** – most current office software & technology, Accounting 30S & 40S credits fulfill high school math requirement, work practicum in an office (6 weeks)
- **Part 1** – 4 credits, offered in semester 1 (part 1 must be taken before part 2)
- **Part 2** – 4 credits, offered in semester 2
- **External Industry Certification** – can take any one of the Microsoft Office Specialist exams in *Word, Excel, Access or PowerPoint* (extra fees apply)

Automotive Technology: Designed for students with strong personal interest in automotive technology and to prepare students for employment or further education in the automotive industry.

- **Skills** – diagnosis and repair related to basic service, mig & gas welding, brakes, engine fundamentals & performance applications, fuel systems, chassis & drive train and electronics
- **Features** – theory (1 period/day), practical lab work (1 period/day), on-the-job training on customer vehicles in a well-equipped 12 bay shop (2 periods/day) and industry work practicum (4 weeks) matched to student's interests
- **Part 1** – 4 credits, offered in semester 1 (students normally take part 1 before part 2 – exceptions based on Industrial Arts or past experience)
- **Part 2** – 4 credits, offered in semester 2
- **Apprenticeship Manitoba** – can receive credit for Level 1 in-school technical training for the trade of Automotive Service Technician
- **Red River College** – can receive credit in the Automotive Technician Certificate Program

Baking & Pastry Arts: Designed for students with strong personal interest in pastry and baking and to prepare students for employment in the food services industry, retail and commercial bakeries and in pastry shops, specialty shops, corporate and health care cafeterias, cruise ships and international resorts and hotels.

- **Skills** – Sanitation and safety procedures, bakery management, quick breads & cookies, yeast goods, wedding & occasional cake production and decorating, special pastries, chocolate, artistic show pieces
- **Features** – theory (1 period/day), on-the-job training in well-equipped bakery (3 periods/day)
- **Part 1** – 4 credits, offered in semester 1
Part 2 – 4 credits, offered in semester 2
(part 2 may be taken before part 1)
- **Apprenticeship Manitoba** – opportunities are available

Building Trades Designed to provide students (minimum 16 years old) with valuable on-the-job experience in one or more building construction trade(s) of personal interest such as carpentry, concrete, bricklaying, framing, heating, plumbing, painting and cabinet-making in preparation for employment, apprenticeship or further education.

- **Skills** – theory and demonstrations focus on all aspects of residential construction including blueprints, concrete, framing, exterior coverings & roofing, interior millwork & finishing, cabinets & finish coatings, electrical, heating & air-conditioning and renovations. On-the-job skills training will vary depending on the trade chosen for industry work practicum.
- **Features** – theory & demonstrations (Mondays at ATC) and industry work practicum (Tuesday – Friday on job sites). Students are required to travel to job sites and may work in adverse conditions.
- **Part 1** – 4 credits, offered in semester 1
- **Part 2** – 4 credits, offered in semester 2
(part 2 may be taken before part 1)
- **Apprenticeship Manitoba** – opportunities are available

Culinary Arts: This program is designed for students with strong personal interest in culinary arts and to prepare students for employment locally, nationally or internationally or for further education in the food services industry.

- **Skills** – preparation of fruits & vegetables, stocks, soups & sauces, meats, poultry, fish & seafood, baking & pastry, nutrition, garde manger, management, purchasing, costing, catering and entrepreneurship
- **Features** – theory (1 period/day), on-the-job training in well-equipped commercial kitchen (3 periods/day), on-site and off-site catering, industry work practicum (4 weeks), culinary competitions.
- **Part 1** – 4 credits, offered in semesters 1 & 2
(part 1 must be taken before part 2)
- **Part 2** – 4 credits, offered in semesters 1 & 2
- **Manitoba Apprenticeship** – can receive credit for Level 1 in-school technical training for the trade of Cook
- **Red River College** – can receive credit in the Culinary Arts Program

Early Childhood Educator: Designed for students with strong personal interest in early childhood education and to prepare students for employment in child care centres. This

program provides a strong foundation and a head start for students considering further post-secondary education leading to Early Childhood Educator II (ECE II) designation.

- **Skills** – development of self-regulation through guided practice, planning play-based experiences and interacting with children through play, providing nurturing care, cultural diversity and family dynamics, human development, infancy & toddlerhood, and communication.
- **Features** – comprehensive child development theory delivered in a teacher-led classroom environment, weekly work practicum in a child care facility
- **Part 1** – 4 credits, offered in semester 1
- **Part 2** – 4 credits, offered in semester 2
(part 2 may be taken before part 1)
- **Red River College** – students who complete the ATC program with a grade of 65% or greater in each course can apply to enter directly into Term 2 of the four-term Early Childhood Education program. RRC Early Childhood Education graduates earn credit toward degree programs at several universities; please see RRC website for details.

Electrical Trades: Designed for students with strong interest in electrical trades. A pre-employment program for individuals who have good mathematical capabilities and are seeking apprenticeship opportunities in electrical trades, or considering a career in electrical engineering.

- **Skills** – principles of electronics including relevant mathematics and physics, Canadian Electrical Code, AC/DC Circuits, residential and industrial wiring, conduit bending, armored cable applications, blueprint reading, installation of complete systems.
- **Features** – Theory in a teacher-led classroom environment, hands-on practical work in a lab facility
- **Part 1** – 4 credits, offered in semester 1
(part 1 must be taken before part 2)
- **Part 2** – 4 credits, offered in semester 2
- **Apprenticeship Manitoba** – students may challenge the Level 1 theory exam administered by Apprenticeship Manitoba. To be eligible, students must gain employment under the supervision of a Journey person Electrician and register as apprentices. Students may begin Apprenticeship while in school.

Esthetics: This program is designed for students with strong personal interest in nail and skin care and to prepare students for employment as estheticians or nail technicians in a salon or spa.

- **Skills** – manicures, pedicures, nail extensions, nail art & nail treatments, skin treatments, make-up application and hair removal
- **Features** – theory, practice on mannequins, on-the-job training on clients in a well-equipped salon facility, competitions
- **Part 1 (Nail Technology)** – 4 credits, offered in semester 1 & 2 (part 1 must be taken before part 2; students must maintain a 70% average and complete required hours throughout part 1 to be eligible to proceed to part 2)
- **Part 2 (Skin Care Technology)** – 5 credits, offered in semester 1 & 2
- **Apprenticeship Manitoba** – students who successfully complete Part 1 (Nail Technology) and obtain a grade of 70% or higher on each component of the practical exam administered by Apprenticeship Manitoba will be eligible to enter a one-year apprenticeship in a salon, which will lead to journeyman status as a Nail Technician. Students who successfully complete Parts 1 & 2 (Nail Technology & Skin Care Technology) and pass the practical exam administered by Apprenticeship Manitoba will be eligible to enter a two-year apprenticeship, which will lead to journeyman status as an Esthetician.

Hairstyling: This program is designed for students with strong personal interest in hairstyling and to prepare students for employment as a hairstylist for both men and women.

- **Skills** – safety & sanitation, hair analysis, shampooing & hair cutting, waving & straightening, permanents, bleaching, conditioning, hairstyling, hair coloring, beauty treatments on face and neck, wig & hairpiece service, trimming beards & mustaches, makeup, eyebrow & eyelash treatments, manicures on natural nails and salon management
- **Features** – theory, practice on mannequins, on-the-job training on clients in a well-equipped salon facility, industry work practicum (1 week), hairstyling competitions
- **Part 1** – 5 credits, offered in semesters 1 & 2 (part 1 must be taken before part 2)
- **Part 2** – 5 credits, offered in semesters 1 & 2 (part 2 must be taken before part 3)
- **Part 3** – 2 credits, offered in semesters 1 & 2
- **Apprenticeship Manitoba** – successful students will be eligible to enter a two-year apprenticeship in a salon, which will lead to red seal journeyman status as a Hairstylist. Students may be eligible to begin a paid apprenticeship while enrolled in the program.

Information Systems Architect: Designed for students with strong personal interest in computer repair and networking and to prepare students for employment in the installation and maintenance of computer hardware, software and network infrastructure. ATC is part of the Cisco Academy Program.

- **Skills** – software, hardware and networking fundamentals and troubleshooting, security and forensic techniques, network gaming and optimization, router programming, home and small business networking solutions.
- **Features** – theory, on-the-job training on clients' computers, industry work practicum (5 weeks)
- **Part 1** – 4 credits, offered in semester 1. (Students normally take Part 1 before Part 2 – exceptions based on experience)
- **Part 2** – 4 credits, offered in semester 2.
- **Red River College** – can receive credit in the following programs: Electronic & Network Technician, Electronic & Network Technician, Electrical/Electronic Engineering Technology, Network Technology (CCNA).
- **External Industry Certification** – Students completing Part 1 can write the CompTIA A+ Computer Repair Technician exam. In Part 2, students may also choose to write the CompTIA Net+ Network Technician exam. Upon completion of first two courses of the Cisco Discovery curriculum, students may be eligible to write the Cisco CCENT Cisco Certified Entry Network Technician exam (extra fees apply).

New Media Design: This course will expose students to different aspects of the New Media Industry through participation in the work flow of designing and developing an online presence. This program provides a solid foundation for students considering a career in website development, computer programming, digital media design, game design and development or other information technology fields whether through direct employment, self-employment or further study at university or Red River College.

- **Skills** – HTML, CSS, Java Script, PHP, website creation and maintenance using Dreamweaver, web layouts and graphics using Photoshop and Fireworks, Flash Games & Action Script, database concepts, business concepts including SEO and Social Media, project management.
- **Features** – web project for a business client(4 months), online portfolio development
- **Part 1** – 4 credits, offered in semester 1 (part 1 must be taken before part 2)
- **Part 2** – 4 credits, offered in semester 2
- **Red River College** – can receive credit in the following programs: Digital Media Design and Business Information Technology

High School Apprenticeship Program (HSAP) Available in LRSD High Schools

HSAP allows Louis Riel School Division students, while attending their home high school or ATC, to earn up to eight grade 12 credits and up to 880 hours of on-the-job training towards continued apprenticeship training after graduation. Depending on school timetable, students may be able to do paid work during the day, evening, or weekend. Summer work can count too. Students must work a minimum of 110 hours towards apprenticeship in any of the designated trades and obtain a grade of 70% or higher on their evaluation to be eligible to receive one credit. ATC students who register for HSAP can combine their on-the-job hours earned in an ATC program with hours earned through HSAP for a significant start on apprenticeship.

- **Skills** – on-the-job skills in over 40 trades consistent with Apprenticeship Manitoba guidelines for training
- **Features** – a way to make your part-time job count and earn grade 12 credits towards graduation, allows you to begin apprenticeship while in school, you get paid to learn
- **Prerequisites** – high school students must have a complete Grade 10, students must be at least 16 years old.
- **Student's Responsibilities** – to gain entry into the HSAP program the student:
 - finds an employer willing and able to train an apprentice
 - contacts the LRSD apprenticeship teacher
 - works with school to ensure an appropriate timetable is possible.

Once accepted into the HSAP program, the student:

- arranges travel to and from work
- maintains all in-school studies and a 70% mark in on-the-job training
- informs the employer of any absences
- reports regularly all hours worked to the LRSD apprenticeship teacher

- **How to Register:** Students may see Mr. Darry Stevens, Louis Riel School Division HSAP Teacher, at their home school or contact him by phone at 204-792-4816. More information about HSAP is available online at <http://www.lrsd.net/schools/atc>
- **Qualifying Trades**

INDUSTRIAL

- Boilermaker
- Electric Motor System Technician
- Industrial Electrician
- Industrial Instrument Mechanic
- Industrial Mechanic (millwright)
- Machinist
- Power Electrician
- Steel Fabricator
- Tool and Die Maker
- Welder

TRANSPORTATION

- Agricultural Equipment Technician
- Aircraft Maintenance Journeyman
- Automotive Service Technician
- Diesel Engine Mechanic
- Gas Turbine and Overhaul Technician
- Heavy Duty Equipment Mechanic
- Marine & Outdoor Power Equipment Technician
- Motor Vehicle Body Painter
- Motor Vehicle Body Repairer
- Railway Car Technician
- Recreational Vehicle Service Technician
- Transport Trailer Technician
- Truck & Transport Mechanic

CONSTRUCTION

- Bricklayer
- Cabinetmaker
- Carpenter
- Concrete Finisher
- Construction Craft Worker (Labourer)
- Construction Electrician
- Crane & Hoist Equipment Operator
- Glazier
- Mobile Crane Operator
- Boom Truck Hoist Operator
- Tower Crane Operator

- Power Generation and Transmission Boom Truck Hoist Operator
- Gasfitter
- Domestic Gasfitter
- Insulator (Heat & Frost)
- Ironworker
- Lather (Interior Systems Mechanic)
- Painter & Decorator
- Plumber
- Refrigeration & Air Conditioning Mechanic
- Rig Technician
- Roofer
- Sheet Metal Worker
- Sprinkler System Installer
- Steamfitter-Pipefitter
- Water and Wastewater Technician

SERVICE

- Cook
- Electrologist
- Esthetician
- Floor Covering Installer
- Hairstylist
- Landscape Horticulturalist
- Parts Person
- Pork Production Technician

