W.C. Miller Collegiate is committed to providing a balanced, comprehensive curriculum, a safe, supportive environment, and a positive preparation for lifelong learning, responsible citizenship and community contribution.

W.C. MILLER COLLEGIATE

Course Descriptions 2018-2019

Principal: A. Pilkington
Vice Principals:
D. Wahl
M. Friesen

181 6th Street SE
Altona Manitoba
R0G 0B3
(204) 324-6416

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Advanced Courses

Advanced Math (45S) *Pre/Co-requisite: Math (40S): Pre-Calculus*

This advanced math course is designed to introduce students to several courses or topics that students might study in university. Major topics include statistics, probability, matrices and conic sections. This is a half credit course, and is often paired with Introduction to Calculus 45S.

Introduction to Calculus (45S) *Pre/Co-requisite: Math (40S): Pre-Calculus*

This advanced math course will cover the topics in first year university calculus. It is a recommended option for students that are required to take Calculus in their first year. The course covers the basic introductory calculus topics: limits, derivative rules, derivative applications, related rates and integration techniques. This is a half credit course, and is often paired with Advanced Math 45S.

English Language Arts

English as an Additional Language (11G)

This is a course aimed at learning English at the beginner level (Canadian Language Benchmarks levels 1-4). Students will learn basic vocabulary through listening, speaking, reading and writing. Students will be exposed to a thematic approach that will allow them to focus on using language in undemanding and non-threatening situations. Themes are language needed for survival or socio-cultural themes. Themes include: greetings, colours, school language, body parts, clothing, food, shelter, personal information, basic numbers, seasons, transportation, weather, holidays, time, calendar, community, safety, sports and games.

English as an Additional Language (21G)

This course is aimed at learning English at the intermediate level (Canadian Language Benchmarks levels 5-7). Students will use vocabulary learned in the beginner course through listening, speaking, reading and writing. They will develop further competence in the themes introduced through the beginner level. Students will be introduced to novels and themes that have been studied by their peers. Academic writing will be introduced with the use of graphic organizers.

English as an Additional Language (31G)

This advanced level course (Canadian Language Benchmarks levels 8-9) encourages the student to participate in conversations, express opinions and develop comfortableness with the English language. The student will be able to read and understand both narrative and expository texts at an increasingly complex reading level. Writing responses of 2-3 paragraphs will be expected.

English (10F)

Students *read, listen to, view* and *analyze* a variety of texts, such as short stories, novels, non-fiction, poems, plays, essays, newspaper articles and editorials, music, films, and television. Students respond by practicing various *writing, speaking,* and *representing* skills, such as personal responses, short essays, narratives, poems, drama roles, debates, role-playing and various "hands-on" projects. Students are given some degree of choice as to the texts they study. Writing skills such as spelling, vocabulary and grammar are worked on continuously, as they appear in reading and writing.

English (20F) *Prerequisite: English (10F)*

This is a general course in language and literature studies. Students are expected to read from a variety of novels, short stories, and other literature. They also respond to their reading through various writing strategies and formats. Students produce a variety of finished pieces: reviews, short stories, research papers, poetry, etc., some of which are presented orally. Writing skills such as spelling, vocabulary and grammar are worked on continuously, as they appear in reading and writing.

NOTE: Each of the following 30S/40S courses may only be taken once for credit.

TRANSACTIONAL FOCUS

ELA: Spoken Word, Debate, and the Art of Story-Telling (30S/40S) *Prerequisite: English (20F)*

In this course students will write, read, listen to, and watch many different forms of literature. As a core course, it emphasizes taking students speaking and writing skills from wherever they are to as high a level as possible. This course will focus specifically on how we express our ideas verbally, how we present in front of others, and how we then listen in kind. Presentations could include motivational speeches, eulogies, lessons, debates, stories, rants, and interviews.

ELA: True Stories and Real Life Writing (30S/40S) *Prerequisite: English (20F)*

This course will focus on Non-Fiction texts in a wide range of styles, including Memoirs, Autobiographies/Biographies, Eulogies, Articles, Editorials, Blogs, and Documentaries. These styles will be read, but also written, focusing on the types of writing that happen in our actual lives. As much as possible, these texts will be presented authentically, such as Letters to the Editor, blogs, resumes, business letters, letters of reference, and proposals.

COMPREHENSIVE FOCUS

ELA: Games: Exploring the Literature of Sports & Game Culture (30S/40S)

Prerequisite: English (20F)

The stories of sports are the stories of heroes, exalted and fallen. They are the stuff of fantasy and the reward of hard work and suffering. Our society makes a game of anything it can and in this way games may be the most powerful of symbols for us. They give athlete and fan alike a sense of purpose, belonging, and childlike wonder. This course, through a range of fiction and nonfiction, will explore the power of the sports story and our love of the game, from the athlete to the video gamer. A short list of possible texts include: Bernard Malamud's The Natural, W.P. Kinsella's Shoeless Joe, Chad Harbach's The Art of Fielding, Michael Lewis's Moneyball, and The Blind Side, Ken Dryden's The Game.

ELA: Fantasy and Sci-Fi Stories: The Worlds of Speculative Fiction (30S/40S)

Prerequisite: English (20F)

The genres of Fantasy and Sci-Fi writing, perhaps more than any other literary genre, are driven by the question, "What if?" *What if I find myself in a new land by walking through a closet? What if we could travel through a wormhole to a new galaxy? What if we all lived in silos buried deep into the ground? What if trees could walk and talk?* These questions create worlds that challenge our understandings of what it means to be human, the nature of the human condition, and the defining characteristics of reality. To ask "what if?" means to imagine, to wonder, and to speculate. Welcome to the Worlds of Speculative Fiction.

ELA: Stories: Multi-Genre Fiction (30S/40S) *Prerequisite: English (20F)*

This is a variety course in which students write, read, listen to, and watch many different forms of literature. As a core course, it emphasizes taking students' writing, reading, and speaking skills from wherever they are to as high a level as possible. This course will focus on fictions many genres, such as mystery, gothic, horror, romance, tragedy, comedy, sci-fi, and fantasy. Work in this class will include analysis, reflection, and creative response.

LITERATURE FOCUS

ELA: Literary Focus (30S/40S) *Prerequisite: English (20F)*

Literature is the branch of English that looks at our world's most important texts – the English canon. In this class we will study poetry, drama, short story, and novel, diving into Literary Theory and different ways of reading, exploring, and enjoying texts. Epic and classic texts will be balanced with important contemporary work. Types of writing will include reflections, creative writing, a reading journal, literary analysis, and argumentative and research essays.

- If you are planning to go to University at all, it is ***important*** to take this class at least once. It will prepare you for the reading and writing of higher education.

The materials in this class will change every other year, so it can be taken in grade 11 and again in grade 12.

Fine Arts

Art (10S)

During this course the students will obtain knowledge based on the fundamentals of art. These fundamentals include the basic skills of drawing, painting, and 3 dimensional. This course is suggested for anyone wishing to continue taking art at high school or for anyone interested in learning how to use basic materials and tools.

Art (20S/30S/40S)

Throughout the remainder of the art courses offered at each level, the range, depth and concepts become progressively more complex. Therefore, as the student continues to take higher-level Art courses, personal choice and decision-making processes become as much a part of the course as the actual end product. Art History is incorporated into the curriculum after 10S.

Junior Concert Band (10S/20S) *Preferred Prerequisite: Grade 8 Band*

In Junior Concert Band, students have the opportunity to expand the musical abilities and understanding developed in middle school. Music from a variety of historical periods and styles is explored and rehearsed with technical, theoretical, and expressive concepts developed in the context of musical performance. The central goal of this course is to develop each student's technical ability,

musical understanding, and aesthetic response while also encouraging them to become the best human beings they can be. Through this process, a strong and supportive community will be developed in the Band Room, and the Junior Concert Band will strive to perform at the highest possible level both in rehearsal and in concerts, festivals, and other events throughout the school year.

Senior Concert Band (30S/40S) *Preferred Prerequisite: Band 20S*

In Senior Concert Band, students have the opportunity to expand the musical abilities and understanding developed in previous years of band experience. Music from a variety of historical periods and styles is explored and rehearsed with technical, theoretical, and expressive concepts developed in the context of musical performance. The central goal of this course is to further develop and enrich each student's technical ability, musical understanding, and aesthetic response while also encouraging them to become the best human beings they can be. Through this process, a strong and supportive community will be developed in the Band Room, and the Senior Concert Band will strive to perform at the highest possible level both in rehearsal and in concerts, festivals, and other events throughout the school year.

Choir (10S/20S)

The Junior Concert Choir comprises students in both grade 9 and 10. This year long course meets on alternate days opposite Junior Concert Band. Classes are rehearsal based and are designed to allow all students the opportunity to make music as part of a community of singers as well as develop individual choral, musical, and performance skills. Repertoire performed by this group is carefully selected to allow students the opportunity to explore a variety of historical contexts and musical styles.

Choir (30S/40S)

The Senior Concert Choir comprises students in both grade 11 and 12. This year long course meets on alternate days opposite Senior Concert Band. Classes are rehearsal based and are designed to allow all students the opportunity to make music as part of a community of singers as well as develop individual choral, musical, and performance skills. Repertoire performed by this group is carefully chosen to allow students the opportunity to explore a variety of historical contexts and musical styles. Students are encouraged, but not required, to participate in Junior Concert Choir prior to Senior Concert Choir as the course is a natural extension of the skills developed in Choir 10G and 20G.

Drama (10S)

This course will be an introductory level course in which students will be introduced to the elements of drama, the basics upon which all theatre activities are based. Students will become more conscious of themselves, as well as the people and world around them. Specific activities include improvisational forms, scripted acting, voice production, script writing, adapting stories, and some exposure to the more specific theatre arts – sets, props, lighting, sound effects, and wardrobe.

Drama (20S) *Pre-requisite: Drama (10S)*

This course will be focused on developing skills in a variety of forms of improvisation. Forms will include improvisational games, developing "freeze-improv" sketches, and theatre for living exercises.

Drama (30S) *Prerequisite: Drama (10S)*

This course continues with all the elements introduced in Introduction to Drama 10S, developing them to a higher level. It also requires the student to develop scripts and then have them acted out in class. It will increase the amount of acting, especially as an ensemble (cast).

Drama (40S) *Prerequisite: Drama (30S)*

This course continues to develop acting skills introduced in grades 9 and 11. It also takes a look at the history of theatre, targets the skills of writing and directing and a more detailed examination of set design, lighting and other elements of stage production.

AUDITION GROUPS

Chamber Choir (20S/30S/40S) *Co-requisite required: Choir*

The Chamber Choir is an auditioned ensemble that works at a high level of musicianship. Students in this choir have the opportunity to develop advanced levels of artistic choral singing, exploring musical styles from both historical composers and modern repertoire. A high level of commitment and professionalism is expected from all members. Chamber Choir is a full credit course that runs for the full school year. The course will run every day within the timetable from September to December during semester 1, and once/week outside of the timetable during semester 2. Interested grade 10-12 students are encouraged to sign up and will be contacted to arrange an audition time in June.

Junior Jazz Band (15S/25S) *Co-requisite required: Concert Band*

In Junior Jazz Band, students are provided the opportunity to dive into the world of big band music and explore a wide array of musical genres/styles including swing, blues, rock/funk, ballad, Latin, and pop. Here the focus is more geared towards performance, and less time is spent on fundamentals, so it is assumed that students are also involved in Junior Concert Band. Improvisation is a huge part of the art form of jazz, and thus it is also a key component of this course. Students work to develop their musical ear and their ability to improvise in a variety of contexts, notably the 12-bar blues and other simple chord changes. Through all of this the Junior Jazz Band will seek to create a tight-knit community of supportive music makers who strive to perform at the highest standards at concerts, festivals, and other events throughout the school year.

Senior Jazz Band (35S/45S) *Co-requisite required: Concert Band*

In Senior Jazz Band, students are provided the opportunity to delve further into the world of big band music through exploration of a wide array of musical genres/styles including swing, blues, rock/funk, ballad, Latin, and pop. Here the focus is more geared towards performance, and less time is spent on fundamentals, so it is assumed that students are also involved in Senior Concert Band. Improvisation is a huge part of the art form of jazz, and thus it is also a key component of this course. Students continue to develop their musical ear and their ability to improvise in a variety of contexts, notably the 12-bar blues as well as more complex chord progressions. Through all of this the Senior Jazz Band will

seek to create a tight-knit community of supportive music makers who strive to perform at the highest standards at concerts, festivals, and other events throughout the school year.

Note: *Students sign up for jazz band in September and are placed in either Junior or Senior Jazz Band depending on grade level and experience. Auditions may be called at the discretion of the band instructor.* ***Jazz Bands rehearse outside of the regular timetable two times per week.***

Vocal Jazz (15S/25S/35S/45S) *Co-requisite required: Choir*

Quantum and Nova are auditioned groups that perform in a contemporary style on microphones and receive one half credit per school year. Students who participate in these ensembles are animated, energetic performers who can learn music quickly and sing independently. These groups focus on performance skills and focused music study. Quantum and Nova participate in festivals and concerts throughout the year including Brandon Jazz Festival in spring. A high level of commitment and professionalism is expected from all members as these courses happen twice a week **outside the regularly scheduled timetable.** Interested students are invited to audition for these ensembles in September.

Guidance

Community Service (41G) (0.5 or 1.0 Credit)

Students can make a contribution by volunteering for worthwhile causes or organizations. The civic skills, knowledge and attitudes obtained from such community service activity can increase a student's self-esteem and maturity, and provide more awareness of the needs of others in the community.
Students must find an organization to volunteer with, commit to 55 (half-credit) or 110 (full credit) hours of time over the course of high school studies, complete forms – Parent/ Guardian Approval and Community Service Approval, be responsible for logging hours (on form provided), submit a journal detailing civic skills, knowledge and attitude obtained from the community service experience and participate in the activity outside of the regular school program.

Humanities

Social Studies (10F/10F-FI)

The course is divided into six sections: (Canada's) people, regions (physical geography), economy, systems of government and law (including the Young Offenders Act), world trade, and relations with the USA. Many class periods focus on current events. Testing and written work are structured in such a way as to invoke the learner to think about "Our Country Today" and what may become of "Our Country in the Future." This course is taught in English and also in French as part of our French Immersion program.

Geographic Issues (20F/20F-FI)

This course introduces and connects both the physical and social perspectives to the study of people, places and environments. Students will gain an understanding of local and global events by studying the processes that shape the Earth and how people and other living things interact with the environment. This course is taught in English and also in French as part of our French Immersion program.

American History (20G)

American History will create a greater understanding of significant historical events that shaped the United States. It is intended to have a focus and emphasis on those historical developments that have influenced the world, especially Canada. A further intent is to identify the personalities who, in a significant way, shaped American history and to examine their contributions. Students will study the story of America before the arrival of Europeans up to the present times, including current events impacting the United States, and us in Canada, today.

History of Canada (30F/30F-FI) *Prerequisite: Geography (20F/20F-FI)*

The Grade 11 History of Canada (30F) 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 times to the present. Through this process students think historically and acquire Enduring Understandings related to the following five themes in Canadian history: First Nations, Métis, and Inuit Peoples; French-English Duality; Identity, Diversity, and Citizenship; Governance and Economics; and Canada and the World. This course is taught in English and also in French as part of our French Immersion program.

Cinema as a Witness to Modern History (40S)

Cinema as a Witness to History 40S (CWMH 40S) is an exciting new course at Miller for 2018-2019. The course is all about movies – the art of moviemaking, how movies reflect the time when they are made, and how movies reflect certain beliefs about history. In class we'll be watching movies in order to learn about the technical aspect of moviemaking. We'll also be digging into the history books in order to learn how the times when the movie was made shaped how it was made. Movies are carefully crafted by their makers so the way they present the world, accurate or not, begs a lot of discussion. Here's a teaser: Are Martian invaders from old-time Sci-Fi films really Martians? Take the course to find out!

Global Issues (40S)

This course offers students the opportunity to learn about some of the key issues facing the world today. These include the environment, food, water, energy, power, trade, and the many other issues that affect our world today. The goal is for students to develop literacy in areas such as the environment and sustainability so that they are equipped to contribute as engaged citizens. Global Issues 40S includes a hands-on Take Action project that involves direct contribution to a community project.

Law (40S)

Laws affect almost everything that we do as we go about living our daily lives. As citizens in a democratic society, we need to know the law and how laws are made so that we can play a part in shaping the laws that are put in place. In Law 40S we work at thinking legally as we study the history of law, human rights, criminal law, civil law, and other types of law in our research projects. The course includes a field trip to the law courts, guest speakers, and frequent discussions of current legal events.

Mathematics

Transitional Mathematics (10F)

Transitional Math provides a bridge between Grade 8 and Grade 9. The course is an opportunity for students to acquire the necessary numeracy skills for future high school math courses. Enrollment in Transitional Math is based on the results of a math assessment done in the spring of a student's grade 8 year.

Mathematics (10F)

Grade 9 Mathematics (10F) is a foundation course to prepare students for multiple possible pathways in Grades 10 to 12. The course builds on the understandings from Kindergarten to Grade 8 Mathematics. In Math 10F students will review work with integers and fractions. A study of exponents and exponent rules will be highlighted. Simplifying polynomial expression and solving algebraic equations are very important aspects of this course. Geometry topics include a study of similar triangles, spatial geometry and symmetry. There will also be a study of probabilities and statistics. A common theme in each topic is an emphasis on students developing their problem solving ability.

Mathematics (20S): Essential Math *Prerequisite: Math (10F)*

Grade 10 Essential Mathematics (20S) is a practical course that focuses on math problems that are encountered in everyday life. Topics include personal finance (calculating pay and deductions), consumer decisions (unit pricing and currency exchange), measurement (metric and imperial units), 2-D geometry (perimeter and area), trigonometry (calculating sides and angles of right triangles), as well as angle construction and transformations.

Mathematics (20S): Intro to Applied & Pre-Calculus *Prerequisite: Math(10F) >75% recommended*

Grade 10 Introduction to Applied and Pre-calculus (MAAP20S) is intended for students considering post-secondary studies that require a math pre-requisite. The course provides students with the mathematical understanding and critical-thinking skills that are used in the sciences. The topics form the foundation Grade 11 Pre-calculus Mathematics.

Mathematics (30S): Essential Math *Prerequisite: Math (20S)*

Grade 11 Essential Mathematics (30S) continues to focus on problems encountered in everyday life. Topics include interest and credit (calculating interest, investing and loans), 3-D geometry (surface area

and volume), managing money (personal budgets), trigonometry (problems involving multiple right triangles), relations and patterns (applying formulas to a problem), as well as statistics (reading and creating graphs) and design modelling (scale drawings and views).

Mathematics (30S): Applied *Prerequisite: Math (20S): Intro to Applied & Pre-Calculus*

Applied Mathematics is intended for students considering post-secondary studies who 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 Intro to Applied & Pre-Calculus (20S). Topics include: Quadratic Functions, Statistics, Systems of Inequalities, Trigonometry, Proofs, Working with Scale, Problem Solving, and a Research Project.

Mathematics (30S): Pre-Calculus *Prerequisite: Math (20S): Intro to Applied & Pre-Calculus*

This is a continuation of the Introduction to Applied and Pre-calculus 20S course with a further emphasis on algebra, quadratic functions, reciprocal functions, and trigonometry. The topics form the foundation Grade 12 Pre-calculus Mathematics. High school pre-calculus courses are required for post-secondary sciences.

Mathematics (40S): Essential Math *Prerequisite: Math (30S)*

Grade 12 Essential Mathematics (40S) is the final credit in Essential Mathematics. Topics include vehicle finance (costs associated with owning and operating a vehicle), home finance (costs associated with purchasing a home), statistics (measures of central tendency and percentile rank), probability (calculating probability, odds, and expected value), geometry and trigonometry (properties of polygons, using sine law and cosine law for non-right triangles), precision measurement (precision, uncertainty, and tolerance when measuring), as well as career life exploration and business finance. Students will write a provincial exam at the end of the semester.

Mathematics (40S): Pre-Calculus *Prerequisite: Math (30S): Pre-Calculus*

This is a continuation of previous courses designed to prepare students for future study of math or science courses at a university level. The course focuses on studying functions that occur in the real world by visually representing those functions, solving related equations and solving contextual problems. Functions covered include radical, rational, logarithmic, exponential, polynomial and sinusoidal. Students will also study transformations, trigonometry, permutations and combinations. Students will write a provincial exam at the end of this course.

Accounting Principles (30S)

This course covers basic financial statements and the simplified accounting cycle. Income statements, balance sheets, journals (general, sales, purchases, cash receipts, cash payments), ledgers, accounts receivable, accounts payable, petty cash, payroll, adjusting entries, journalizing and posting, month-end procedures, banking and bank reconciliation statements are a few of the topics covered in this course.

Accounting Systems (40S) *Prerequisite: Accounting (30S)*

Accounting Systems 40S focuses on accounting for a merchandising business and converting manual accounting records to computerized accounting systems *(Simply Accounting).* This course builds on and expands accounting principles and concepts introduced in Accounting 30S.

Physical Education

Important considerations for Physical Education classes:

- Students are expected to have appropriate footwear and clothing for gym activities i.e.: sweatshirts, sweatpants, shorts and runners.
- Attendance Policy: If the student needs to be excused from participation in Phys. Ed. class for medical reasons, they must report to the gym with a note from a guardian or medical professional.

Parents/Guardians of grade 11 & 12 students in the 75% out option will be required to review the student's physical activity plan and sign a Parent Declaration and Consent Form acknowledging their approval of the chosen activities and acceptance of the responsibility for risk management, safety, and supervision. Parents/Guardians will also be required to verify the entries of the student's physical activity log through a sign-off procedure.

Health / Physical Education (10F)

Grade 9 Health deals with the five new general learning outcomes referred to as the "Healthy Active Five". The units covered include Movement, Fitness Management, Safety, Personal/Social Management and Healthy Lifestyle Practices.
Grade 9 students meet in a co-ed setting for Phys. Ed. They meet every other day in a six-day cycle for one semester. Classes are run in the following manner: cardiovascular conditioning, muscle flexibility and toning followed by the daily activity generally beginning with drills and lead up games, followed by the actual game situation. One hour of credit is gained per class to a maximum of one ½ credit (45 hours) in grade 9. Evaluation criteria include fitness tests, self-evaluation and teacher evaluation.

Health / Physical Education (20F)

The Grade 10 Health course further develops the five general learning outcomes referred to as the "Healthy Active Five". The units covered include Movement, Fitness Management, Safety, Personal/Social Management, and Healthy Lifestyle. Phys. Ed.
Grade 10 students meet in a co-ed setting for Phys. Ed. They meet every other day in a six-day cycle for one semester. Classes are run in the following manner: cardiovascular conditioning, muscle flexibility and toning followed by the daily activity generally beginning with drills and lead up games, followed by the actual game situation. One hour of credit is gained per class to a maximum of one ½ credit (45 hours) in grade 10. Evaluation criteria include fitness tests, self-evaluation and teacher evaluation.

Health & Phys. Ed (30F/40F)

Fitness Focus:
The Active Healthy Lifestyle 30F and 40F compulsory full-credit courses are 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 in 30F will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport. While students in 40F will study topics related to fitness management, nutrition, social/ emotional health and personal development.
Fitness Centered Approach-This course places an emphasis on active participation in a fitness-orientated class. Here students will work hard each day through numerous work-outs, keeping the body functioning at a high-level. In this course students will chart their progress, and will see positive results as they push themselves to achieve success. As part of earning a credit for this course, students will be required to submit a personal fitness portfolio containing elements such as a fitness plan, physical activity log, or journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation. The course will be delivered in two formats: 100% in school and 25% in school, 75% out of school.

Games Emphasis:
The Active Healthy Lifestyle 30F and 40F compulsory full-credit courses are 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 in 30F will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport. While students in 40F will study topics related to fitness management, nutrition, social/ emotional health and personal development.
Traditional Sports and Games-This course places an emphasis on active participation in a wide variety of large group games and traditional sports. Programs are structured so that the duration, intensity, and frequency of activities motivate students to meet their individual goals. Students will focus on different activities each week, increasing their interest and skill level, as well as participating in a vigorous fitness-oriented warm up. As part of earning a credit for this course, students will be required to submit a personal fitness portfolio containing elements such as a fitness plan, physical activity log, or journal entries. Students will be graded for completion of the course with a Complete or Incomplete designation. The course will be delivered in two formats: 100% in school and 25% in school, 75% out of school.

Hockey Skills (11G)

The W.C. Miller Hockey Canada Skills Academy allows local school boards the opportunity to work together with Minor Hockey Associations and Hockey Canada to offer hockey as an academic option to any student wishing to participate in the program. The role of the Hockey Canada Skills Academy is to: provide additional skills training for minor hockey aged players, supplement, not compete with, the existing programs run by Altona Minor Hockey, provide emphasis on individual skill development and academic achievement and create an environment for skill development which will enhance game

performance. Hockey Skills 11G introduces the student to all aspects of skating, shooting, passing, and puck control. The course consists of on-ice, off-ice, and classroom sessions.

Hockey Skills (21G) *Prerequisite: Hockey Skills (11G)*

The W.C. Miller Hockey Canada Skills Academy allows local school boards the opportunity to work together with Minor Hockey Associations and Hockey Canada to offer hockey as an academic option to any student wishing to participate in the program. The role of the Hockey Canada Skills Academy is to: provide additional skills training for minor hockey aged players, supplement, not compete with, the existing programs run by Altona Minor Hockey, provide emphasis on individual skill development and academic achievement, and create an environment for skill development which will enhance game performance. Hockey Skills 21G is a progression from Hockey Skills 11G in the skill development areas of skating, shooting, passing, and puck control. Students are also introduced to team and positional play. The course consists of on-ice, off-ice, and classroom sessions.

Hockey Skills (31G) *Prerequisite: Hockey Skills (21G)*

The W.C. Miller Hockey Canada Skills Academy allows local school boards the opportunity to work together with Minor Hockey Associations and Hockey Canada to offer hockey as an academic option to any student wishing to participate in the program. The role of the Hockey Canada Skills Academy is to: provide additional skills training for minor hockey aged players, supplement, not compete with, the existing programs run by Altona Minor Hockey, provide emphasis on individual skill development and academic achievement, and create an environment for skill development which will enhance game performance. Hockey Skills 31G is a progression from Hockey Skills 21G in the skill development areas of skating, shooting, passing, and puck control. Students will also learn positional play in all three zones of the ice as well as concepts and ideas related to special teams play. The course consists of on-ice, off-ice, and classroom sessions. Students will earn certification in the Sport Manitoba Respect in Sport course as well as Concussion Awareness.

Practical Arts

Introduction to High School (10S)
This course consists of two half-credit courses, each with specific outcomes:

Applying Information and Communication Technology I 15F:
This course is designed to introduce students to some of the major concepts of computing and technology so that they can decide which areas they wish to focus on in the future. Topics include: desktop publishing using Word, spreadsheets and databases using Excel and Access, presentation software using Power Point, and Keyboarding using a web based program. WEB 2.0 applications will be used throughout the course to make students aware of free software that is comparable to the programs taught in class. Internet safety will be addressed, as well as "digital footprints" through social media.

Life/Work Exploration 15S:
The primary objective of this course is to help our incoming Grade 9 students make a successful transition from junior high to high school. W. C. Miller Collegiate believes that this successful transition is not simply measured in terms of a student's academic progress, but also includes their development in the areas of strength of character, decision making skills, effective social skills, organization skills, independence, and empathy skills.

Home Economics (10G)
This course consists of two half-credit courses, each with specific outcomes:

Foods and Nutrition 15G:
The primary objective of this course is to gain an understanding of basic nutrition. This includes the study of nutrients, what foods they are found in and how to make healthy food choices. Students will also learn how to prepare healthy foods in the kitchen and will practice safety, sanitation, safe knife handling and basic food preparation skills.

Clothing and Textiles 15G:
The primary objective of this course is to learn the basics of clothing construction including fabric characteristics and care. Students will learn the safe and correct operation of a sewing machine as well as basic hand sewing techniques.

Home Economics (20G)

In this course students will learn basic cooking and sewing skills. In the Clothing & Textiles portion of the course, students will complete textiles projects according to their skill level. In the Foods & Nutrition portion of the course students will learn how to prepare simple meals and recipes as well as kitchen and food safety, sustainability and the environmental impact of our food system, nutrition, and meal planning.

Home Economics (30G)

This course builds on the grade 10 level course offering deeper learning and increased challenge in all areas. In the Clothing & Textiles portion of the course, students will choose projects that challenge their level of ability which could include knitting, crocheting, quilting in addition to machine sewing. In the Foods & Nutrition portion of the course students will learn how to prepare meals, how to adapt and modify recipes to increase nutritional value, safety and sanitation in food preparation as well as current issues in food systems and nutrition.

Woodwork Technology (10G) *$40 + additional project costs*

This course is open to all who are interested in Building Technologies. It is an entry-level woods course; a program designed for anyone with an interest in woodworking. This course emphasizes skill and technique development with tool operations and applications. Students are required to provide a calculator, duo-tang and pencil with good eraser. Students will be asked to cover costs for projects that can be taken home upon completion.

Woodwork Technology (20G) *$40 + additional project costs*

This course is designed to introduce students to Construction Technology principles and practices. It is an entry-level cabinetry course designed for anyone with an interest in fine woodworking. Students will be expected to provide a calculator, duo-tang and pencil with good eraser. Students will be asked to cover costs for projects that can be taken home upon completion.

Woodwork Technology (30G) *$40 + additional project costs*

This course builds in the principles and practices of Intro to Cabinetry. It is an advanced level cabinetry course designed for students with an interest in further developing their woodworking skills.

2D Animation/3D Modelling (35S/35S) *preference given to Grade 11 or Grade 12's*

This course consists of two half-credit courses, each with specific outcomes:

2-D Animation 35S: The purpose of this course is to provide students with the skills and knowledge to create two-dimensional animations. The class will use Adobe Flash to create animations like those found on websites, video games and movies.

3-D Modeling 35S: The purpose of this course is to provide students with the skills and knowledge to use software to create three-dimensional models that represent real objects or illustrate ideas. Blender, a free, downloadable program will be used to teach the course outcomes.

Broadcast Media/Digital Filmmaking (35S/25S)

This course consists of two-half credit courses, each with specific outcomes:

Broadcast Media 35S:
The purpose of this course is to provide students with an understanding of digital audio software and professional recording techniques. The students will walk through all steps in the recording process to produce a final professionally sounding recording.

Digital Film Making 25S:
The purpose of this course is to explore professional video shooting and editing techniques. Students will combine sound, still images, moving images, text, graphics, and animation into a video product.

Digital Pictures/Desktop Publishing (25S/35S)

This course consists of two-half credit courses, each with specific outcomes:

Digital Pictures 25S:
The purpose of this course is to explore professional photography skills and techniques as well as photo editing tools. Students will spend most of the time in Adobe Photoshop.

Desktop Publishing 35S:
The purpose of this course is to provide students with the skills and knowledge to plan and create a variety of published print documents. Course outcomes include incorporating elements of good design when designing documents, planning and producing brochures, flyers, media inserts etc. and

participating in multi-document editing and reviewing. Students will use the following Adobe products: Photoshop, Illustrator, InDesign.

Web Design/Interactive Websites (35S/35S)
This course consists of two half-credit courses, each with specific outcomes:

Web Design (35S):
The purpose of this course is to provide students with the skills and knowledge to design, develop, and publish a simple website. Course outcomes include designing a website for a defined audience and purpose, explaining the needs for standards and conventions when creating websites, and creating a website that includes multiple pages, formatting, content objects and navigation tools.

Interactive Websites (35S):
The purpose of this course is to provide students with the skills and knowledge to design, develop, and publish a website to display and gather information. Course outcomes include being able to discuss the advantages and costs of using a content management system when creating and maintaining a website, being able to create and use tags and publishing a website.

Yearbook: Graphic Communication Technology (30S)
Prerequisite: Digital Media, Graphic Design Web Design, OR Art 20S & 30S

This is a specialty course in yearbook production. Students will focus on the basics of photography, layout and design. The goal of this course as well as the bulk of course work and assignments will center on the production of the yearbook. Students will develop technical skills in photography, digital and desktop publishing (Adobe PageMaker and Photoshop).

Science

Science (10F)

This required course introduces students to the world of science. Students are required to gain science knowledge by performing labs, activities, and direct instruction in a safe, responsible manner. Science 10F focuses on basic biology, physics, chemistry and astronomy. Both the theory and lab work emphasize problem solving and the link between science, technology and society.

Science (20F) *Prerequisite: Science (10F)*

The curriculum for this required course was designed to develop scientific literacy among senior year's students. Scientific knowledge, skills and behaviors will be emphasized. Science 20F focuses on physics, chemistry, biology and meteorology. Students will be expected to use previously acquired math skills to solve science problems.

Biology (30S) *Prerequisite: Science (20F)*

This course is an overview of the systems that constitute the human body as well as the processes that regulate it. The body systems that will be studied include: digestion, circulation and respiration,

excretion, immune and nervous system. The major theme of the course is homeostasis and its importance in all life processes. Personal wellness and lifestyle choices are also emphasized. There will be a variety of dissection and lab opportunities throughout the course.

Biology (40S) *Prerequisite: Biology (30S)*

This course is developed along three major themes: genetics, biodiversity, and evolution. There is a strong emphasis on memorization of processes and facts during the course. Some lab and fieldwork is integrated into the various units of this course.

Chemistry (30S) *Prerequisites: Science (20F), Math (20S)*

In Chemistry 30S students investigate the concept of the mole, predict chemical equations, and make stoichiometric calculations. Other topics include gas laws, vapor pressure, boiling points, solutions and molar calculations. An additional topic may include organic chemistry. Lab work forms an integral part of this course. The course is dependent upon significant dedication from the student. Strong math skills are required. If you are considering attending university, this course is highly recommended.

Chemistry (40S) *Prerequisites: Math (30S):Pre-Calculus, Chemistry (30S)*

Grade 12 Chemistry will strengthen students' upper-level thinking as well as their problem solving skills using organized, detailed mathematical work. Topics covered in this course include kinetics, chemical equilibrium, acids & bases, electrochemistry, and atomic structure. The course will touch on some organic chemistry. Labs form an integral part of this course. The course is dependent upon significant, dedicated commitment from the student. Strong math skills are required. If you are considering attending university, this course is highly recommended.

Physics (30S) *Prerequisites: Science (20F), Math (20S)*

Grade 11 Physics allows students to develop problem solving skills in theoretical and practical applications. A list of topics in this course include waves, kinematics (study of motion), dynamics (study of forces & Newton's Laws), and electric, magnetic and gravitational fields. The course emphasizes problem solving and critical thinking. Labs form an integral part of this course. Physics 30S is dependent upon significant and dedicated commitment from the student. Students entering physics should have a strong math background. If you are considering attending university, this course is highly recommended.

Physics (40S) *Prerequisite: Physics (30S), Pre-Calculus Math (30S)*

Grade 12 Physics deepens the understanding, details and skills covered in Grade 11 Physics. The course will allow students to develop an understanding of the basic principles and concepts of physical science, while further developing critical thinking and problem solving skills. The topics studied are vectors, graphical relationships, kinematics, dynamics, projectiles, circular motion, work and energy, gravitational, electric and electromagnetic fields. Labs form an integral part of this course. The course is dependent upon significant and dedicated commitment from the student. Students entering physics should have a strong math background. If you are considering attending university, this course is highly recommended.

Computer Science (20S)

Computer Science 20S is an introductory programming course. Students will learn the basics of simple event-driven programming with a progression toward Java. Although there are many theoretical aspects of computer science, the focus of this course is on the practical. Even if students are not sure they want to pursue a career in computer programming, this course will teach them approaches to problem solving that can be applied in many other areas.

Computer Science (30S) *Prerequisite: Computer Science 20S*

Computer Science 30s builds on previous knowledge learned in Computer Science 20s. Students will continue to work on their problem-solving skills and cover a different way of approaching programming - object oriented. More advanced topics will be covered including graphical interfaces as well as exploring potential employment opportunities.

Computer Science (40S) *Prerequisite: Computer Science 30S*

Computer Science 40S builds on previous knowledge learned in Computer Science 30S. Students will continue to work on their problem-solving skills however an emphasis will be placed on group projects. Advanced topics such as Array Lists, Linked Lists, sorting will be covered. We will also begin to program in multiple programming languages.

Robotics (30S)

This is a hands on course where students develop skills in engineering, problem solving and programming. Each unit will end with the students competing to create the best robots for specific scenarios. The course is built around the Lego Mindstorm EV3 kits.

World Languages

Programme d'immersion française – French Immersion Program

The **French Immersion Program** at W. C. Miller is a direct continuation of French Immersion Program in the Border Land School Division. Throughout the following four courses, communication during class time will be spent entirely in French. As communication courses, the topics are relevant and of interest – *we listen to, read, talk and write about things that happen in our everyday lives.*

Français langue seconde – Immersion 10F

Prerequisite: Programme d'immersion française - 8e année

This course is a transition course to senior high school French. The one hour class will be conducted fully in French. Emphasis is placed on communication in the second language; students will practice speaking French to express themselves, writing in a variety of ways and for different purposes, as well as listening to and reading in French for comprehension and information. Using the textbook, exercises, videos, projects, novel studies, and games, students will be able to use what they are learning to engage in various topics of conversation in French.

Français langue seconde – Immersion 20F

Prerequisite: Français langue seconde – immersion 10F

Everyday communication in French through speaking, listening, reading and writing continues to be the emphasis at this level. The one hour class will be conducted fully in French. New vocabulary and grammatical structures are again practiced and reinforced through the use of conversational activities, videos, games, novel studies, and more.

Français langue seconde – Immersion : langue et communication 30S

Prerequisite: Français langue seconde – immersion 20F

Students continue to develop precision with grammar and to expand their vocabulary. Classes conducted strictly in French, along with letter-writing, reading French stories, newspapers and magazines, and listening to French interviews all reinforce skills in listening, speaking, writing and reading. Again, real conversations about everyday topics continue.

Français langue seconde – Immersion : langue et communication 40S

Prerequisite: Français langue seconde – immersion : langue et communication 30S

As in French 30S, students will continue to develop an extensive vocabulary as well as precision with higher-level grammar. Through daily conversation, reading and writing in French, the students continue to develop their communication skills in the French language. French texts, literature, letter-writing, conversation, games, videos and projects also enhance the students' learning in French.

French at W. C. Miller is a direct continuation of "French: Communication and Culture" program (formerly called Basic French) in the Border Land School Division. Throughout the following four courses, there is a gradual shift toward class time being spent entirely in French – this reflects the increasing importance of spoken French throughout the four courses. As communication courses, the topics are relevant and of interest – *we listen to, read, talk and write about things that happen in our everyday lives.*

French (10F) *Prerequisite: Grade 8 French*

This course is a transition course to senior high school French. Emphasis is placed on communication in the second language; students will practice speaking French to express themselves, writing in a variety of ways and for different purposes, as well as listening to and reading in French for comprehension and information. Using the textbook, exercises, videos, projects and games, students will be able to use what they are learning to engage in various topics of conversation in French.

French (20F) *Prerequisite: French (10F)*

Everyday communication in French through speaking, listening, reading and writing continues to be the emphasis at this level. New vocabulary and grammatical structures are again practiced and reinforced through the use of conversational activities, videos, games and more.

French (30S) *Prerequisite: French (20F)*

Students continue to develop precision with grammar and to expand their vocabulary. Classes conducted mostly in French, reading French stories, newspapers and magazines, and listening to French interviews all reinforce skills in listening, speaking, writing and reading. Again, real conversations about everyday topics continue.

French (40S) *Prerequisite: French (30S)*

As in French 30S, students will continue to develop an extensive vocabulary as well as precision with higher-level grammar. Through daily conversation, reading and writing in French, the students continue to develop their communication skills in the French language. French texts, literature, letter-writing, conversation, games, videos and projects also enhance the students' learning en français.

Spanish (10F)

Spanish is the language of Spain and most of South America and the "second language" in many parts of the United States. There are significant Spanish-speaking communities found in Canadian cities such as Montreal, Toronto and Winnipeg and many aspects of Hispanic life and culture are already familiar - food, Latin music, art and literature. This course will cover basic grammar, some Spanish culture and has a strong aural-oral emphasis. Presented in the first year are the alphabet, numbers and many of the basic verbs needed in everyday speech.

Spanish (20F) *Prerequisite: Spanish (10F)*

This course builds on the skills learned in Spanish 10F. New vocabulary includes the extended family, shopping and clothes, restaurants and food, and travels to Madrid, Spain. Many new verbs are introduced in order for students to talk and read about these experiences, as well as to listen and write. Students continue to learn Spanish culture from both Latin America and Spain.

Spanish (30S) *Prerequisite: Spanish (20F)*

This course continues to build on the skills learned in Spanish 20F. This level includes authentic representation of the culture of the Spanish-speaking world (including North America). New vocabulary such as sports, body parts and seeing a doctor, and daily routine is introduced. At this level students become immersed in the past tense so that they are able to talk/read/write about and listen to what they and others did yesterday, last week, and last year.

Spanish (40S) *Prerequisite: Spanish (30S)*

This course again builds on previous levels, while expanding vocabulary and engaging students in the language. At this level the student will work with several more verb tenses including another past tense as well as the subjunctive tense. Students will spend time reading Spanish books, listening to authentic native speakers, writing different kinds of texts as well as speaking the language to each other.

Red River Technical Vocational Area (rrtva.ca)

RRTVA is a group of school divisions in south-eastern and south-central Manitoba dedicated to providing access to high quality technology education programs for area high school students.

Partner School Divisions include: Border Land School Division, Division scolaire franco-manitobaine, Garden Valley School Division, Red River Valley School Division, and Western School Division.

Program Options Include:
Auto Body – Morris School, Morris
Automotive Technology – RVS, Dominion City
Carpentry – WCMC, Altona
Community Health & Child Care – Child Care Focus – NPC, Winkler
Educational Assistant – NPC, RRC, Winkler
Culinary Arts – WCMC, Altona
Heavy Duty Equipment Technology – GVC TEC, Winkler
Electrical Technology – NPC, Winkler
Esthetics – Nail Technology – NPC, Winkler
Hairstyling – NPC, Winkler
Health Care Aide – WCMC, Altona
High School Apprenticeship Program
Introduction to Construction Trades (ICT) – WCMC Altona & Morden
Introduction to the Trades (ITT) – Morris & RVS, Dominion City
Piping Trades – Morden Collegiate, Morden
Welding – Morris School, Morris

Program Application
Students must apply for these programs during the registration period. A separate RRTVA application form must be signed and submitted indicating student interest. There are limited seats available in each program and RRTVA in consultation with schools determine which students get these spots. If the number of student applications exceeds the seats available in a program, additional information may be collected by the school to inform decision making.

Program Format & Transportation
Students spend an entire semester attending the RRTVA program of their choice with the potential to earn up to 4 credits. RRTVA uses a system of shuttle buses to transport students from one school to another within the regular school day. Classes begin at approximately 9:30 a.m. and end at approximately 2:30 p.m. Students are able to use their regular divisional transportation system to access the shuttle to the program of their choice without extending their day.

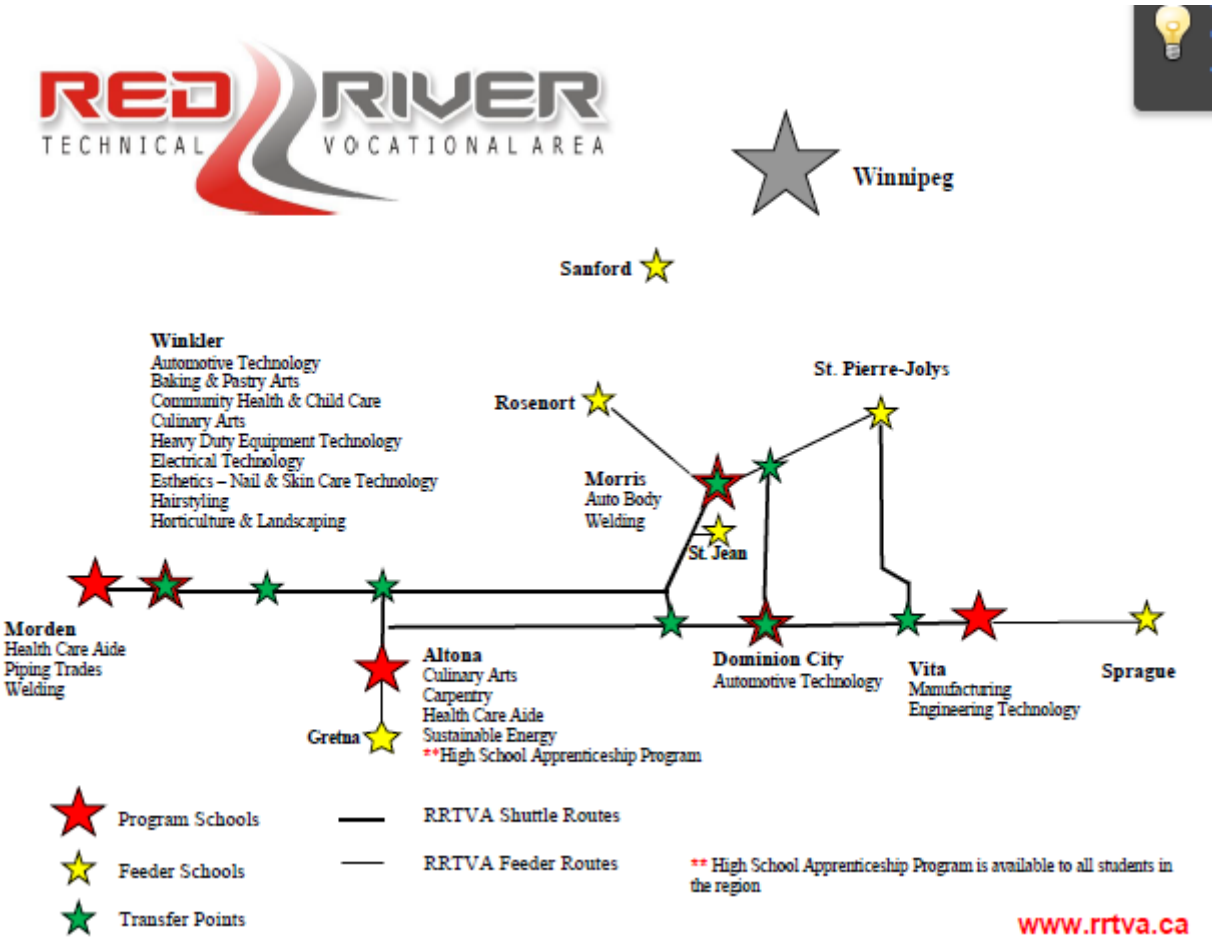
Full-Day Programs Offered Through Red River Technical Vocational Area (RRTVA)

The RRTVA is a consortium of regional high schools which have joined together to offer a wider variety of technology education programs than any one of them could offer on their own. It has become part of a strong tradition of working together to provide high quality technical education options to high school students of southern Manitoba.

Students typically take one semester of regular academic courses at their home school and one semester of technical training at the consortium school that offers the program. Programs may take from one to three full semesters to complete.

Almost all trades related programs are accredited with Manitoba Apprenticeship. If a student achieves a grade of 70% or higher in any accredited program, they may be granted the first level of technical training in the trade for which that program is accredited. They will still need to complete the Practical Training Time Credit for the first level which can be started through the High School Apprenticeship Program for high school credit as well.

Transportation to partner schools is provided and the classes are contained within the regular school day. This allows students to remain, involved with extra-curricular activities in their home schools.



Each of the programs are outlined on the following pages. Any students interested in registering for any of the RRTVA programs must complete and hand in a RRTVA application form to the W.C. Miller Collegiate office. RRTVA intent forms are available on our website- RRTVA.ca and/or at the W.C. Miller Collegiate office.

Auto Body (Morris School, Morris)

The Auto Body program prepares students to work in auto body repair shops and to prepare and apply finishes to a wide variety of surfaces. With the increasing complexity in automotive design, construction and finishes, this has become a technically advanced area of study. Students learn to work with a variety of automotive components, materials and finishes. Skills learned in this program are also valuable in other areas of study such as engineering and manufacturing.
Students learn the basics of auto body repair and painting techniques through a variety of assignments and special projects. Classroom theory is combined with a great deal of hands-on practice and learning in the shop. After learning to use hand and power tools related to the trade, students practice the skills on sample vehicle panels. As their skills develop, students have the opportunity to work on live projects including collision repair and customization of personal or customer vehicles.

The Exploration of Welding Technology 10S credit will be delivered in one six week block at the Morris School Welding facility. The Introduction to Automotive Technology 10S credit will be delivered in one six week block at the Automotive Technology facility in Dominion City.

Many students have found jobs with auto body repair shops and automobile dealerships. As well, on completion of the program employment opportunities may include:

Automotive Detailer
Auto Body Supplies person
Radiator Repair Technician
Insurance Estimator
Insurance Adjuster
Industrial Spray Painter
Glass and Trim Sales and Installer

ITT- Intro to Auto Body, Welding and Automotive Technology **Section 2 – may start in grade 11**

9028 Exploration of Collision Repair & Refinishing Technology 10S
8695 Intro to Automotive Technology 10S
8377 Exploration of Welding Technology 10S
9174 Exploration of Technical Vocational Education 10S
9029 Intro to Collision Repair & Refinishing Technology 20S
9030 Fundamentals for Collision Repair & Refinishing Tech. 30S
9035 Surface Preparation & Refinishing 40S
9036 Colour Theory & Career Preparation 40S

Section 3

9031 Automotive Metals & Welding 40S
9032 Corrosion Protection 30S
9033 Damage Analysis & Structural Repairs 40S
9034 Weld-on & Bolt-on Panel Replacement 40S

The Auto Body program is accredited with Manitoba Apprenticeship. If a student achieves an accumulated average of 70% or higher, they may be eligible for their first level of technical training in the Automotive Painter or Motor Vehicle Body Repairer trade.

Automotive Technology (Roseau Valley School, Dominion City)

This program involves the maintenance and service of automobiles, heavy duty and agricultural equipment. Students learn about the service, maintenance and repair of mechanical systems through classroom instruction, along with practical experience in the shop. Students diagnose problems with motor vehicles and other equipment, and then perform the required service and repairs.
The student learns the proper use of trade related tools and equipment. Other related topics such as safety, mathematics, and science and trade technology are also covered. Students in Section 3 participate in an integral work placement component which allows them the opportunity to work with skilled technicians in a workplace setting, often results in local employment opportunities and improved future employment opportunities after graduation.
Many students have found employment with automobile and truck dealerships as well as companies servicing agricultural and construction equipment. A variety of mechanical, manufacturing and engineering occupations also fall into this category.

Employment opportunities may include:

Automotive Technician	Diesel Technician	Air Craft Technician
Transmission Technician	Fleet Services Technician	Highway Tractor Operator
Service Writer/Advisor	Machinery Set-Up Person	Parts Clerk/Sales
Automotive Instructor	Industrial Mill Wright	Farm Implement/Agriculture

The Automotive Technology program is accredited with Manitoba Apprenticeship. If a student achieves an accumulated average of 70% or higher, they may be eligible for their first level of technical training in the Automotive Service Technician Trade. Practical training hours can be acquired through the High School Apprenticeship Program (HSAP) - a high school, evening/weekend/summer work practicum recognized Apprenticeship MB.
The Exploration of Welding Technology 10S and the Intro to Auto Body Repair 10S credit will be delivered in six week blocks at Morris School in Morris.

Automotive Technology courses include:

ITT- Intro to Auto Body, Welding and Automotive Technology
9028 Exploration of Collision Repair & Refinishing Technology 10S
8695 Introduction to Automotive Technology 10S
8377 Exploration of Welding Technology 10S
9174 Exploration of Technical Vocational Education 10S

Section 2 – may start in grade 11

8696 Automotive Systems and Service 20S
8697 Engine Fundamentals and Service 30S
8701 Vehicle Systems Part 1 40S
8702 Vehicle Systems Part 2 40S

Section 3

8698 Chassis Fundamentals & Service 30S
8699 Drivetrain Fundamentals & Service 30S
8700 Automotive Electrical Systems 40S
8703 Applied Diagnostic Strategies 40S

Carpentry (W.C. Miller Collegiate, Altona)

The Carpentry program provides students with the opportunity to experience many aspects of the trade of carpentry. The first section is an opportunity to explore the trade. Students learn how to use the tools and equipment, learn about measurement and how to transfer information from a drawing to a project. As student's progress through the program, they develop their skills and knowledge on more complex and challenging projects as they prepare to make the transition to the work place. Precision, craftsmanship, and safe work procedures are emphasized throughout the program.

Career and Employment Opportunities

A student graduating from the Carpentry program can seek entry level employment in the construction industry. There are employment opportunities in the residential, commercial, and industrial construction sectors. Students can continue with their apprenticeship training or obtain post-secondary education in a variety of areas related to construction.

The opportunities range from work as a labourer to professional occupations. The career paths can be classified as follows:

- Labour – machine operator, general labourer, concrete finisher, etc.
- Trades – carpenters, electricians, plumbers, etc.
- Technical – surveyors, building inspectors, draftsperson, etc.
- Professional – architect, engineer, etc.

If a student achieves an accumulated average of 70% or higher in section 2 & 3 of the Carpentry program, they may be eligible for an exemption of the "in-school" portion of Level 1 Apprenticeship training at Red River College. Additional Practical training hours can be acquired through the High School Apprenticeship Program (HSAP) -a high school, evening/weekend/summer work practicum recognized by Apprenticeship MB.

The Exploration of Plumbing & Piping Trades 10S and the Exploration of Technical Vocational Education 10S credit will be delivered in ten weeks at Morden Collegiate in Morden.

Carpentry Courses include:

ICT – Introduction to Construction Trades – Offered to Grade 10's

8584 Introduction to Carpentry 10S
7994 Construction Technology 40S
8859 Exploration of Plumbing & Piping Trades 10S
9174 Exploration of Technical Vocational Education 10S

Apprenticeship
A partnership for industry training

Section 2 – may start in grade 11

8585 Carpentry Fundamentals 20S
9188 Carpentry Tools & Equipment 30S
9189 Framing 30S
9190 Exterior Finishing 30S

Section 3

9191 Surveying & Concrete 40S
9192 Advanced Framing 40S
9193 Carpentry Millwork 40S
9194 Applied Carpentry 40S

Community Health and Child Care (Northlands Parkway Collegiate, Winkler)

This program is designed to provide students with the necessary entry level care giving skills required to be a service provider or assistant in a daycare, or school. Areas of study will focus on communication, personal presentation, observation and reporting human development and basic technical information specific to each area of study. These skills will be gained through academic activities and practicum experience. Students will have an opportunity to acquire certification in Red Cross Emergency First Aid. Students who have an interest in careers and future studies in Child Care, Nursing, Teaching, Social Work and other care-related careers will find this program very beneficial.

This is a cooperative technology program. Approximately one half of the student's time will be spent in the classroom setting and the other half in a work placement (daycare, early years classroom.

Child Care Emphasis

8661 Communication Skills 30S
8658 Intro to School Age 30S
8743 Health & Safety 30S
8739 Pre-School Children 30S

Educational Assistant (Red River Community College, Winkler)

This program is suitable for students wanting employment as Educational Assistants in the public or private school systems. The Educational Assistant course is a dual credit program offered jointly by the schools in the RRTVA and Red River College.
As a pre-requisite students should be in Grade 12. Students who have already graduated may apply directly for admission with no pre-requisite. All admissions will be done in consultation with Red River College. Students must meet Red River College admission requirements.

While this program is open to senior years students it should be noted that these courses are delivered at the college level by Red River College. At the time of printing, funding for this program is under review.

The Educational Assistant program includes:

8666 Applied Child Care 40S	8663 Curriculum Planning 40S
8668 H.S. Tech Initiative 40S	8667 Advanced Applied Child Care 40S

Educational Assistant students must be registered at Miller, and must ALSO complete a Red River College registration form and submit the RRC college registration fee to the Winkler college office. This should be done at the same time course registrations take place at Miller.
Forms and more information for registration are available at: www. RRTVA.ca

Culinary Arts (W.C. Miller Collegiate, Altona)

Where can you learn how to cook your way to success? The W.C. Miller Collegiate Culinary Arts program in Altona. Learn in what is arguably the best equipped teaching kitchen in all of Manitoba. Large food preparation areas, industrial grade equipment and experienced professional staff allow you to learn the basics of the commercial food industry while completing a high school diploma. When you're done you'll be confident and prepared to join the hospitality industry; one of the fastest growing industries in Canada today.

The Culinary Arts program is a two section, eight credit program that teaches the basics of commercial cooking. Students will have the opportunity to learn the skills and attitudes necessary to find employment in entry-level positions in a variety of food service areas such as cafeterias, dining rooms, institutions, and restaurants.

You can also take our third section in Commercial Baking to learn more about a fascinating and delicious sub-trade in the culinary arts industry. No good meal is complete without dessert and neither is our program!

The Culinary Arts program is accredited by Manitoba Apprenticeship and lets you get your start on a Red Seal (your professional certificate) in the cook trade. If a student completes the first two sections of the Culinary Arts program and achieve an accumulated average of 70% or higher, they may be eligible for their first level of technical training in the Cook Trade. Additional Practical training hours can be acquired through the High School Apprenticeship Program (HSAP) - a high school, evening/weekend/summer work practicum recognized Apprenticeship MB.

Some time is spent each day studying theory through assignments, tests, and instructional packages. The majority of the day is spent in the kitchen applying this theory and preparing food for service. This is the only program where you have an exam every day - Lunch! The Culinary Arts program serves a spacious 300 seat cafeteria at Miller Collegiate and you get to see the success of your efforts each day.

Culinary Arts courses include:

Section 1

8791 Cooking Principles 20S
8792 Garde Manger 30S
8793 Patisserie and Baking 30S
8795 Stocks, Soups & Sauces 40S

Section 2

8794 Veg, Fungi, Starches & Farinaceous Products 30S
8796 Breakfast and Dairy 40S
8797 Menu Planning and Food Costing 40S
8798 Meats, Poultry, Fish & Seafood 40S

Section 3

8324 Intro Baking & Pastry Arts 20S
8338 Quick Breads, Cookies, Doughnuts, Pies 30S
8339 Yeast Dough Products 30S
8998 Advanced Baking & Pastries 40S

Heavy Duty Equipment Technology (GVC TEC, Winkler)

The **Heavy Duty Equipment Technology** program is replacing the **Diesel Technology** program. This program involves the development of many technical hands-on skills that are needed for a technician to be successful in the ever changing field of Heavy Duty Equipment Technology. This training will create vital job opportunities for each student's future.

Training will include items such as: forklift licensing, safety training, welding, operation of heavy equipment, rebuilding engines, transmissions, hydraulic pumps, fuel injectors, fuel pumps, and computer diagnostics.

Students will explore the important role that the diesel industry plays in our economy, and will begin to develop knowledge and skills specific to Heavy Duty Equipment Technology. The Heavy Duty Equipment Technology program will offer career education in a field that is growing rapidly and deemed vital in both the agricultural, transportation, and construction sectors.

This program is aligned with Manitoba Apprenticeship training, offering students with an accumulated average of 70% or higher, their first level of technical training in 3 Heavy Duty Equipment Technician trades: (1) Farm Equipment Technician, (2) Heavy Duty Technician, (3) Truck Transport Technician.

Heavy Duty Equipment Technology Courses include:

Section 1

8673 Introduction to Heavy Duty Equipment Technology 20S
8674 Diesel Engines Fundamentals and Service 30S
8675 Chassis, Frame and Undercarriage System 30S
8676 Welding Processes and Fuels 30S

Section 2

8677 Standard Transmissions, Drivelines, Transfer Cases and Power Take Offs 40S
8678 Tires, Wheels and Brake Assemblies 40S
8679 Electrical Fundamentals, Computers, and Diagnostic Equipment 40S
8704 Applied Heavy Duty Equipment Technology 40S

Electrical Technology (Northlands Parkway Collegiate, Winkler)

The Electrical Technology program provides students with the knowledge and skills necessary to install, operate, trouble shoot, service and repair electrical equipment in residential, commercial and industrial settings.

In the Electrical Technology program the students:

- Preform actual wiring in a series of projects, from simple circuits to more complex circuits
- Cover current, voltage, resistance, switch currents, Ohm's Law, series and parallel circuits and electronic measurement.
- Research and become familiar on how to locate and interpret the Canadian Electrical Code book
- Understand different types of AC Circuits including AC test equipment, inductive, capacitive and transformers.
- Be introduced to basic industrial wiring including fire alarm systems, conduit bending, armoured cable applications, motor controllers, blueprint reading and the Canadian Electrical Code
- Read and interpret blueprints, drawings and code specifications for layout and installation of electrical equipment
- Learn safe working procedures, conditions & injury prevention
- Will receive WHMIS training
- Receive training in human relations, customer service, organization skills running a small business and apprenticeship applications
- Install, repair and replace electrical wiring, receptacles, switch boxes, conduits, feeders, cable assemblies, lighting fixtures and other electrical components
- Test electrical and electronic equipment for continuity, current voltage and resistance
- Troubleshoot, maintain and repair electrical and electronic control systems and devices as well as micro-processor-based systems
- Calibrate instrumentation devices

Section 1
9055 Introduction to Electrical Trades Technology 20S
9056 Electrical Trades DC Fundamentals 30S
9057 Residential Wiring 30S
9059 Advanced Residential Wiring 40S

Section 2
9058 Electrical Wiring Methods 30S
9060 Electrical Trades AC Fundamentals 40S
9061 Advanced Electrical Wiring Methods 40S
9062 Applied Electrical Trades Technology

The Electrical Technology program is aligned with Manitoba Apprenticeship level 1 training, which offers a student who has completed this program with an accumulated average of 70% or higher

eligibility for their Level 1 Apprenticeship training in the 3 Electrical Trades: (1) Construction Electrician, (2) Industrial Electrician, (3) Power Electrician.

Esthetics- Nail Technology & Skin Care Technology (Northlands Parkway Collegiate, Winkler)

The Esthetics program will provide the students with the knowledge and skills necessary for all aspects of nail and skin care including manicures, pedicures, nail extensions, nail art and treatments, skin care and treatments, make-up artistry and hair removal. The program will provide the students with theory and practical training on mannequins and real clients in a new well-equipped salon facility.

PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS:
All students entered in this program are required to wear the following Personal Protective Equipment while working in both the classroom and the salon: Black dress pants, closed-toe shoes with rubber sole (no slipper/moccasin, or UGG type shoes), other required equipment will be provided by the department. Please refer to the instructor of the course for further details.

ENTRANCE REQUIREMENTS:
A student interested in enrolling in the esthetics major should be in good health and have good physical stamina. This industry is not only mentally, but physically challenging. Long hours will be spent sitting, standing, bending, reaching and repeating the same motions. If a student has a bad back or weak knees this course is not recommended. Students must have good vision and hearing (normal or corrected); be non-allergic to chemical solutions; be able to read directions; be friendly and congenial with customers and fellow students.

There are two combined trades in this program:

In the **Section 1 Nail Technology (4 credits)** courses the students will:
-Basic of Chemistry, Anatomy, Physiology and Infection Control
-Perform manicures and pedicures on fellow students and clients
-File and shape nails, remove cuticle and callus, massage
-Removes and applies nail enamel/semi-permanent polish to nails
-Perform manicure and pedicure treatments-paraffin, hot stone and spa
-Applies artificial nail enhancements-gel, acrylic and fiberglass temporary nail tips
-Decorate clients' nails with designs and attach ornaments to nails
-Prepare for provincial practical exam

Students who take this program and earn an average of 70% or higher with the required hours are recognized by Manitoba Apprenticeship as having completed their Technical Training for the Nail Technician Trade. Practical training hours can be acquired through the High School Apprenticeship Program (HSAP) - a high school, evening/weekend/summer work practicum recognized Apprenticeship MB.

Students completing the required Section 1 are eligible to enroll in the Skin Care Technology program for an additional 2 Sections.

In the **Section 2 & 3 Skin Care Technology (8 credits)** courses the students will:
-Basics of Anatomy, Physiology, Dermatology, Histology, and Infection control
-Assess each client's skin condition and appearance to recognize diseases and disorders
-Demonstrate proper cleansing, exfoliation, and perform extractions for facial treatments and product knowledge
-Provide cosmetic massages and body treatments
-Correct skin problems using facial machines-high frequency, steamer, galvanic and more
-Perform day-time, evening, bridal and dramatic make-up and advise client
-Remove unwanted hair using depilatory methods

Students who successfully complete all three levels of this program and earn an average of 70% or higher with the required hours are recognized by Manitoba Apprenticeship as having completed their Technical Training for the Esthetics Trade. Practical training hours can be acquired through the High School Apprenticeship Program (HSAP) - a high school, evening/weekend/summer work practicum recognized Apprenticeship MB.

Hairstyling (Northlands Parkway Collegiate, Winkler)

Students in this program receive theoretical knowledge and practical experience in all phases of hair, face and nail care. A student should have creative ability, good finger dexterity, a pleasing personality, and must enjoy working with people. Good health is essential and a student should not have any chemical allergies. Students interested in this program should have the physical stamina required to stand for long periods.

Students learn the many customer service aspects of hairstyling, scalp, nail, and skin care. They are trained in treatments for hygienic or remedial purposes as well as beauty services such as manicures, hair removal and make-up applications.

Students learn through classroom theory instruction, work on mannequins as well as working with models. Evaluation for each unit will consist of assessing written assignments, theoretical knowledge, and practical performance and life skills.

Upon completion of the 1400 hour accredited hairstylist program and a 70% course average, the student will qualify for the Hairstylist apprenticeship program. This will allow them to be employed in a salon and work towards their interprovincial "Red Seal" certification.

Section 1
8312 Intro to Hairstyling 20S
8313 Basic Hairstyling 20S
8314 Basic Haircutting & Thermal Styling 20S
8315 Related Salon Services 20S

Section 2
8316 Intermediate Haircutting & Barbering Techniques
8317 Hair Colouring
8318 Intermediate Hairstyling & Artificial Hair
8319 Chemical Texture Services

Section 3
8320 Advanced Hairstyling & Colouring 40S
8321 Advanced Haircutting & Chemical Texturizing 40S
8322 Salon Operation 40S
8323 Certificate Preparation 40S

Health Care Aide (Altona)

Health Care Aide is a dual credit program offered jointly by schools in the RRTVA and Red River College, Winkler Campus. This college accredited program is offered at no cost for tuition or books to eligible high school students. High School Graduates may receive a subsidy for a portion of the Health Care Aide program tuition costs. This program will prepare students for entry level jobs in the health care field as nursing aides in hospitals and care homes as well as, home care workers.

Health Care Aide students are enrolled in a sponsoring RRTVA school as well as at Red River College (RRC). The credits earned in this program are registered at both their home high school as well as at RRC. Upon successful completion of the program, students will receive five Grade 12 credits as well as the RRC Health Care Aide certificate which is recognized in the health care field across Manitoba.
While this program is open to Grade 12 students, it should be noted that the courses are delivered at a college level by RRC and the requirements are those of a college classroom. While a high school credit may be granted if the student achieves a grade of 50% or better, the college requires a minimum of 70% to be eligible for their certificate. The college reserves the right to change its requirements as they see fit.

As a pre-requisite, under-graduate students must be in Grade 12 and may have completed at least one level of the Community Health and Child Care program or Family Studies 40S to be considered for the program. Students who have already graduated may apply directly for admission with no pre-requisite.
All admissions will be done in consultation with Red River College and all applicants will be required to successfully complete a Degrees of Reading Proficiency Test (DRP) through the college.
Students may use these credits towards a Manitoba Senior Years Technology diploma. Check with your home school counsellor for details.

Health Care Aide course include:
8804 Safety in Health Care 40S
8803 Human Relations 40S
8808 Aging and Related Disorders 40S
8811 Concepts for Practice 40S
8812 Personal Care Skills and Needs 40S

Health Care Aide students must be registered at Miller, and must ALSO complete a Red River College registration form and submit the RRC college registration fee to the Winkler college office. This should be done at the same time course registrations take place at Miller.
Forms and more information for registration are available at: RRTVA.CA

ICT – Introduction to Construction Trades (W.C. Miller Collegiate & Morden Collegiate)

This semester is intended for students wishing to sample the construction trades with an emphasis is on hands-on activities. Students are introduced to common practices in the carpentry and piping profession including safety, reading blueprints, tools and equipment and participating in trade based projects.

Students will identify, explore, and work on various wood projects while developing technical skills with various hand and power tools common to the carpentry trade. They will also develop skills in communication through drafting, and apply basic math concepts to solve trade-related problems.

While in Morden at the Piping Trades portion of the semester students learn to construct, repair and maintain piping systems, fixtures and appliances in all types of buildings and structures. It introduces students to many aspects of the piping trades including the use of hand tools, portable power tools and other equipment used in the industry. Students will practice threading, soldering, and constructing projects using PVC and copper pipes.

ICT- Introduction to Construction Trades include- Offered to Grade 10's
8584- Introduction to Carpentry 10S
7994 Construction Technology 40S
8859- Exploration of Plumbing & Piping Trades 10S
9174- Exploration of Technical Vocational Education 10S

The Exploration of Plumbing & Piping Trades 10S and the Exploration of Technical Vocational Education 10S credit will be delivered in ten weeks at Morden Collegiate in Morden.

ITT- Introduction to Trades and Technology (Morris & Roseau Valley School)

Introduction to Trades Technology (ITT) is a single semester which introduces students to basic mechanical skills used in many industries today. The Automotive Technology, Welding and Auto Body Repair shops are used to familiarize students with the tools and processes of three interrelated trades. Students can also use this semester to help them decide on which of the three programs they would like to specialize.

In the ITT semester, the student spends one-third of the time in each of the three shops mentioned above. The student spends approximately six weeks studying the introductory skills of each of the three trades. The skill learned in any one of the shops may then be applied in the other two shops to increase the students level of proficiency in the trade.

Students planning on entering any one of the trades full time will have exposure to related trades and processes as well as some of the vocabulary and tools they use.

The three credits listed below form an integral part of the program. A fourth credit, Introduction to Heavy Industrial Technology will be granted upon successful completion of the three credits. Students taking the ITT program will receive preferred entry into the second and third levels of the related program in which they choose to specialize.

The ITT courses include:

- 8377 Exploration of Welding Technology 10S
- 8695 Introduction to Automotive Technology 10S
- 9028 Exploration of Collision Repair & Refinishing Technology 10S
- 9174 Exploration of Technical Vocational Education 10S

Piping Trades (Morden Collegiate, Morden)

The newly introduced Piping Trades program is an 8 credit program offered in two semesters at Morden Collegiate. This program provides a foundation for students to go directly into work, continue their post-secondary education in the Piping Trades, steamfitter, sprinkler fitter, HVAC technician, gas fitter, plumber, petroleum technician, pipeline worker, building maintenance, power engineer controls technician, instrument fitter, oilfield worker, fabrication worker, rigger and waste water technician.

Completion of training in this program will improve student's chances of locating employment as an apprentice in the Piping Trades field. Students who have completed section 2 and 3 with an accumulated average of 70% or higher may be eligible for their Level 1 Apprenticeship training in the Plumbing trade. Additional practical training hours can be acquired through the High School Apprenticeship Program (HSAP) – a high school evening/weekend/summer work practicum recognized Apprenticeship MB.

Piping Trades Courses include:
ICT- Introduction to Construction Trades- Offered to Grade 10's
8584- Introduction to Carpentry 10S
7994 Construction Technology 40S
8859- Exploration of Plumbing & Piping Trades 10S
9174- Exploration of Technical Vocational Education 10S

Section 2- may start in Grade 11
8876 Introduction to Plumbing and Pipe Trades 20S
8877 Introduction to Piping Systems and Theories 30S
8878 Installation of Plumbing and Piping Systems I 30S
8879 Installation of Plumbing and Piping Systems II 30S

Section 3
8981 Sanitary Venting Systems 40S
8982 Sanitary Drainage Systems 40S
8984 Installation of Plumbing and Piping Systems III 40S
8985 Applied Plumbing and Piping Systems 40S

The Introduction to Carpentry 10S and the Construction Technology 40S credit will be delivered in ten weeks at Miller Collegiate in Altona.

Welding (Morris School, Morris)

The Welding program provides students with the background, skills and knowledge required for careers in the welding workforce. Students completing this course may be ready to enter the workforce as production welders or enter into an apprenticeship agreement with an employer.

This program involves the joining and cutting of various metals using equipment of the trade. There are numerous welding processes, depending on the type of equipment and techniques used. Students are exposed to MIG, TIG and Arc welding as well as gas welding. In addition they are exposed to other types of metal working equipment such as presses, ironworkers, pipe bending equipment and plasma cutters using portable manual and fixed CNC equipment.

Students learn by doing. By studying the theory and then doing the related practical projects, students can achieve a high skill level. Once students have mastered the skills of a particular process they will reinforce this learning by designing and building projects which might include utility or custom-made trailers, ornamental railings and ironwork, gym equipment, and projects brought in from the community. Students are required to study related subjects such as safety, math, blueprint reading, and metallurgy to complement their practical work.

Completion of training in this program will improve student's chances of locating employment as an apprentice in the welding field. Students who have completed this program with an accumulated average of 70% or higher may be eligible for their first level of Apprenticeship training in the Welding trade. Additional practical training hours can be acquired through the High School Apprenticeship Program (HSAP) - a high school, evening/weekend/summer work practicum recognized Apprenticeship MB.

The program will also assist in developing entry level skills for workers in a wide range of employment opportunities such as:

Construction Welders Maintenance Welders Specialty TIG Welders
Production Line Welders Welding Inspectors Welding Supplies Salesperson
Related professions such as: Drafting, Engineering and Architecture

Welding Technology courses include:

ITT-Intro to Auto Body, Welding and Automotive Technology
9028 Exploration of Collision Repair & Refinishing Technology 10S
9174 Exploration of Technical Vocational Education 10S
8377 Exploration of Welding Technology 10S
8695 Introduction to Automotive Technology 10S

Section 2
8378 Introduction to Welding Technology 20S
8414 Metal Design/ Fabrication and Oxy-Acety Procedures 30S
8474 Basic GMAW (MIG) Procedures 30S
8487 Advanced GMAW (MIG) Procedures 40S

Section 3

8486 Basic SMAW (ARC) Procedures 30S
8488 Advanced SMAW (ARC) Procedures 40S
8489 Advanced Metal Design/Fabrication 40S
8503 Applied Specialties & Qualifications 40S

Work Experience Opportunities

Career Development Internship (CDI)

The goal of this program is to provide opportunities for students to explore career interests while still in high school. Grade 11 and 12 students can learn more about the careers that they are considering by discussing various options with the Career Internship Teacher and by working directly with people in the organizations of their choice. The time required for this program is very flexible and can work around a variety of schedules. There is no specific class time, but students should allow approximately 13 hours per week with 10 hours in a work setting and 3 hours for self-directed learning activities. The potential work-placements are too many to list and W.C. Miller is very fortunate to have the support of many local businesses that are willing to take the time to introduce students into their organizations.

High School Apprenticeship Program (HSAP)

Pre-requisite: Students must be 16 years old, & have completed Grade 9.

This program allows students to start an apprenticeship program while still in high school. It links high school instruction with paid, part-time, on-the-job apprenticeship training. Students need a qualified and insured employer who will hire them and train them as an apprentice. The HSAP Coordinator at the Apprenticeship Branch will work with the school, student, employer and the program coordinator to facilitate the apprenticeship. Students will earn one credit for every 110 hours of apprenticeship training, to a maximum of eight credits. Students will be paid a trade-specific rate and may apply their on-the-job hours to full-time apprenticeship training after graduation. Working hours can be scheduled to include evenings, weekends and summer break. The HSAP is an excellent way for student to increase their 1) personal employability skills, 2) work-world essential skills, 3) technical trade knowledge, and 4) technical trade skills.

For more information talk to your school guidance counsellor or contact the High School Apprenticeship Instructor at 204-304-0985 or 204-319-0711

Benefits of the HSAP

- earn up to eight supplemental academic credits for graduation
- be paid more than minimum wage
- credits received may pay for postsecondary training
- use this work experience to get a full-time job
- apply your on-the-job hours to full-time apprenticeship training after graduation

Eligible Trades

You have access to career opportunities in almost 60 trades. For a more complete listing of eligible trades refer to Manitoba Trades:
http://www.gov.mb.ca/wdis/apprenticeship/pdfpubs/pubs/discover/hsap_brochure.pdf

Note: These credits may be complimentary to some RRTVA (Manitoba Apprenticeship Accredited) programs in our region.