## WMCI

## Course Description Handbook



2024-2025
William Morton Collegiate Institute Course Description Handbook

## Level 10 (Grade 9) Compulsory Credits

## Canada in the Contemporary World 10F (1 credit)

Students focus on the opportunities and challenges at the core of Canada's contemporary plurality. They begin with an overview of Canada today, including its demographics, geography, and political organization. They examine the evolving stories of interaction among the people of Canada and the influence of the land on the development of Canada. They explore the historical and contemporary complexities of citizenship and identity, considering the challenges and opportunities that emerge when groups with differing identities and perspectives interact with one another. Contemporary Canadian questions and issues are examined within the global context. Students are given opportunities to explore how they may become involved in Canadian issues. Through this inquiry, they are enabled to become informed decision-makers actively involved in their local, national, and global communities.

## English Language Arts 10F (1 credit)

The course is focused on providing students with the opportunity to develop specific strategies and skills to increase their ability, knowledge, and learning in the language arts. This is a foundational course designed for students to experience and produce $50 \%$ pragmatic material (created to provide information/opinion) and 50\% aesthetic material (created for literary enjoyment).
Pragmatic material includes such forms as essays, editorials, news articles, documentaries, and reports. Aesthetic material includes such forms as novels, poems, short stories, films, drama, artwork, and photographs. Each sequence of study (thematically based) allows for the active use of the six language arts strands speaking, listening, reading, writing, viewing, and representing.

## Mathematics 10F (1 credit)

Grade 9 Mathematics is a foundational course to prepare students for multiple pathways in Grades 10 to 12. The learning outcomes are divided into four strands: Numbers; Patterns and Relations; Shape and Space; Statistics and Probability. Within these strands are units of study including Square Roots and Surface Area, Powers and Exponent Laws, Rational Numbers, Linear Relations, Polynomials, Linear Equations, Similarity and Transformations, Circle Geometry, and Probability and Statistics. Students require an inexpensive geometry set and a scientific calculator. Students will, however, be encouraged to use mental math for a majority of the coursework.

## Physical Education/Health 10F (1 credit)

Physical Education 10F is an introduction to senior physical education courses. Team sports, introduction to individual sports, fitness training and improvement, and rules and history are covered. The main focus is on participation and the importance of physical activity as part of a healthy lifestyle.
Health 10 F makes up one-half of the Physical Education 10F credit. The focus of the Grade 9 health course is on the prevention of health problems by promoting physical, social, emotional, and intellectual well-being. Units of study include physical well-being, social-emotional well-being, nutrition, safety, community health, and family life.

Physical Education/Health 10F: Healthy Lifestyles Focus(1 credit)

This compulsory full-credit course is designed to help youth take
greater ownership of their own physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement a personal physical activity plan as part of a physical activity practicum.

## Physical Education/Health 10F Sport Specialization (1 credit)

This compulsory full-credit course is designed to help youth take greater ownership of their own physical fitness, to encourage them to seek out activities that interest them, and to specialize in school sports (volleyball, basketball, track, etc.). Students will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sport. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement these strategies, skills and physical requirements as they relate to the extra-curricular sports offered at WMCI.. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. As well, specific sports training in Volleyball, Basketball and other sports will be pursued, including coaching strategies, training techniques, skill techniques, etc.

## Reading is Thinking 15S (.5 Credit) / Print Communications 25S (. 5 credit)

The RIT course assists students with making connections to reading in three main ways to develop skills needed for effective metacognition (self-thinking while learning):
1.) Thinking About Self: developing identities as confident, engaged, and motivated readers; 2.) Thinking About Text: developing the characteristics and practices of proficient readers before, during, and after reading across the curricula (content area and pleasure reading)
3.) Thinking About the World: developing critical reading/literacy skills to demonstrate a deeper understanding of a variety of texts to express and substantiate personal positions as well as solve problems, make decisions, resolve conflicts, and take action in their world.
Students will demonstrate their abilities to choose, and effectively use, a variety of reading strategies to improve their learning. These will include word study, personal reflections and journaling, metacognitive strategies, vocabulary, and pre-, during, and post-reading strategies.

## Science 10F (1 credit)

Grade nine science expands on topics introduced in grades seven and eight. These topics include:

1. Biology outlines reproduction in organisms from the simplest single-celled organisms to the complexities of human reproduction and genetics.
2. Atoms and Elements are the background focus of Chemistry in preparation for learning chemical properties, symbols, and formulas.
3. Electricity offers an understanding of electrostatics and current electricity.
4. Astronomy explores the universe using observational techniques and inquiring into space issues and technology.

## Transitional Mathematics 15F (. 5 credit)

Transitional math offers students the basic mathematical and study skills that they will need to be successful in their high school careers. Students will need to demonstrate the following behaviors; persistence, listening and understanding, flexibility in thinking, and effective questioning. Transitional Math will revisit and strengthen skills developed in previous math courses as well as introduce some new skills and techniques to aid in problem-solving. Topics include; rational numbers, integers, geometry, and financial mathematics.

## Level 10 (Grade 9) Optional Credits

**Students can enroll in other grade level optional credits provided prerequisites are met. Please refer to Level 20/30/40 course descriptions throughout this handbook**

## Business Innovations 10S (1 credit)

An introductory course that allows students to sample the various strands within the applied commerce education program. The course offers students the opportunity to explore commerce-related topics, such as economics, entrepreneurship, business marketing, technology, and finance. Throughout the course, students will apply the concepts and strategies they learn to a variety of creative business projects or simulations.

Choir 10G (1 credit) (Previous choir exposure is recommended but not mandatory)
The Grade 9 Choir program is performance-oriented. Students will continue to develop and improve their singing skills learned in elementary choir. Different genres of music will be learned and sung. Along with singing various repertoire, this course also includes ear training and sight singing.

## Concert Band 10S (1 credit) (Previous band exposure is recommended but not mandatory)

Students will develop their performing and ensemble skills sequentially through the grade 9, 10, 11, and 12 band courses. The music selections serve as the central course material and will advance as the grade level increases. These courses provide development in instrumental technique, reading skills, active listening skills, historical perspective, musicianship, expression, and creativity. Each grade level will perform and study music from diverse genres and periods in music history. Performance opportunities are available to the students in the form of clinics, workshops, festivals, day trips, and overnight trips. Band is accessible to all, and registrations are welcome from students who have not had the opportunity to be part of a band program previously.

## Drama 10G (1 credit)

There are 4 main focus points in this course. Students will develop an understanding of and facility with dramatic forms and elements. Secondly, students collaboratively and individually generate, develop, and communicate ideas in creating and performing drama for a variety of purposes and audiences. Students connect drama to contexts of time, place, and community, and develop an understanding of how drama reflects and influences culture and identity. Finally, students will analyze, reflect on, and construct meaning in response to their own and others' dramatic work.

## Exploration of Graphic Design 10G (1 credit)

Students taking graphic design programs should be considering a career or further education in the graphic design field. This course will focus on basic design theory, the design process, the elements and principles of design, and practical application while using industry-level machinery and computer software. There will be a heavy emphasis on Adobe software throughout the course. Students are encouraged to think creatively and be able to work in small groups to solve design challenges. This course will have a final project/portfolio as the final assessment valued at $15 \%$ of the overall grade.
**Maximum student capacity per class of 16; $\$ 25.00$ fee for general usage. Additional fees may be required depending on usage and possible project ideas mentioned in class.

## French 10F (1 credit)

The purpose of the core French curriculum is to encourage the learning of French as a means of communication and to make it an integral part of the student's overall education. The Basic French program stresses that French is not only the subject matter but also the language of instruction. The program encourages a multidimensional approach consisting of four components: experience / communication, culture, language, and general language education. The program has moved away from the traditional approach of simply memorizing grammatical rules and structures to learning the language by communicating and participating in the most authentic experiences possible. The core French program teaches standard French, the socially sanctioned variety of French that the majority of francophone people use in formal communication, both oral and written.

## Industrial Arts: Metalwork Technology 10G (1 credit)

This course is designed to introduce students to metallurgy, welding, and basic manufacturing. Students will cover machine safety and procedures. They will work on various machines to prepare metal for welding various joint configurations and manufacturing project parts. Students will follow steps to produce projects throughout this course. Welding areas that will be covered are Shielded Metal Arc Welding, Gas Metal Arc Welding, and Flux-Core Arc Welding.
**Maximum student capacity per class of $16 .{ }^{* *}$ ** $\$ 20.00$ shop fee for materials used.**

## Industrial Arts: Power Mechanics Technology 10G (1 credit)

Students taking this course will study a variety of engine systems such as fuel, ignition, lubrication, and cooling. Once the systems have been studied, small engines will be disassembled, reconditioned, and assembled. There will also be time for students to troubleshoot issues with the startup of engines. Upon completion of the course, students should have a good foundation of motor fundamentals.
${ }^{* *}$ Maximum student capacity per class of 16 .** ** $\$ 20.00$ shop fee for materials used.**

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## Level 20 (Grade 10)

## Compulsory Credits


#### Abstract

English Language Arts 20F (1 credit) (Prerequisite: English Language Arts 10F) The course is focused on providing students with the opportunity to develop specific strategies and skills to increase their ability, knowledge, and learning in the language arts. This is a Foundation course designed for students to experience and produce $50 \%$ pragmatic material (created to provide information/opinion) and $50 \%$ aesthetic material (created for literary enjoyment). Pragmatic material includes such forms as essays, editorials, news articles, documentaries, and reports. Aesthetic material includes such forms as novels, poems, short stories, films, drama, artwork, and photographs. Each sequence of study (thematically based) allows for the active use of the six language arts strands - speaking, listening, reading, writing, viewing, and representing.


## Essential Mathematics 20S (1 credit) (Prerequisite: Mathematics 10F)

Grade 10 Essential Mathematics is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. The main areas of study include Problem Solving, Personal Finance (gross pay, deductions, income formulae), Measurement (metric and imperial conversions), 2-D Geometry (perimeter, area, volume), Trigonometry (Pythagorean theorem, sin, cos, tan), Consumer Decisions (pricing, currency exchange, sales), Transformations (coordinate geometry translations, rotations, reflections, and dilations), and Angle Construction (bisecting, parallel, perpendicular, pairings, and transversals). Students require an inexpensive geometry set and scientific calculator.

## Geographic Issues of the $21^{\text {st }}$ Century 20F (1 credit) (Prerequisite: Social Studies 10F)

In Geographic Issues of the 21st Century, students focus on a variety of issues and challenges of the contemporary world. They explore the nature of geography and develop skills related to geographical thinking. Students use the methods and tools of geography to examine issues and problems and to propose solutions. They study concepts related to the ownership and development of natural resources, production and distribution of food, development of industry and trade, and increasing urbanization. Students consider these issues in the context of Canada, North America, and the world. Through their study, students become aware of the importance of the environment, stewardship, and sustainable development, as well as the social, political, and economic implications of their personal choices.
The major areas of study in this course are Geographic Literacy, Natural resources, Industry \& Trade, and Urban Places.

> Intro to Applied and Pre-Calculus Mathematics 20 ( 1 credit) (Prerequisite: Mathematics 10F) Grade 10 Introduction to Applied and Pre-Calculus Mathematics is intended for students considering post-secondary studies that require a math pre-requisite. The learning outcomes are divided into three strands: Measurement; Algebra and Number; Relations and Functions. Within these strands are units of study including Metric and Imperial Surface Area and Volumes, Trigonometry, Factors and Products of Polynomials, Roots and Powers, Graphing Relations and Functions, Linear Functions, and Systems of Linear Equations.
> ${ }^{* *}$ A scientific calculator is required OR **APP on a personal device.

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## Physical Education/Health 20F: Healthy Lifestyles Focus(1 credit)

(Prerequisite: Physical Education/Health 10F)
This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement a personal physical activity plan as part of a physical activity practicum.

## Physical Education/Health 20F Sport Specialization (1 credit)

(Prerequisite: Physical Education/Health 10F)
This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them and to specialize in school sports (volleyball, basketball, track, etc.). Students will study topics related to fitness management, mental health, substance use, and abuse prevention, and the social impact of sports. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement these strategies, skills, and physical requirements as they relate to the extra-curricular sports offered at WMCI. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. As well, specific sports training in Volleyball, Basketball, and other sports will be pursued, including coaching strategies, training techniques, skill techniques, etc.


#### Abstract

Reading is Thinking 20S (1 credit) (Prerequisite: RIT10S is recommended but not mandatory) The RETH course assists students with making connections to reading in three main ways to develop skills needed for effective metacognition (self-thinking while learning): 1.) Thinking About Self: developing identities as confident, engaged, and motivated readers; 2.) Thinking About Text: developing the characteristics and practices of proficient readers before, during, and after reading across the curricula (content area and pleasure reading) 3.) Thinking About the World: developing critical reading/literacy skills to demonstrate a deeper understanding of a variety of texts to express and substantiate personal positions as well as solve problems, make decisions, resolve conflicts, and take action in their world. Students will demonstrate their abilities to choose, and effectively use, a variety of reading strategies to improve their learning. These will include word study, personal reflections and journaling, metacognitive strategies, vocabulary, and pre-, during, and post-reading strategies. Students will also focus on the writing fundamentals at the high school level including sentence structure, punctuation, capitalization, verb-tense agreement, paragraph structure, self-editing, and proofreading. Then, students will explore the essay writing process from the pre-writing stage to the revision stage before moving to the phases of the research process. The goal is that students will be able to plan, develop, draft, and revise a research paper with parenthetical citations and a Works Cited page in MLA format.


## Science 20F (1 credit) (Prerequisite: Science 10F)

This course offers students an insight into four major areas of science including biology, chemistry, physics, and weather dynamics. These four areas will prepare the student for future science-related courses. Understanding the balance of nature, chemical reactions, speed and acceleration, and global weather patterns are a few of the topics that will be covered in this course.

## Level 20 (Grade 10)

## Optional Credits

**Students can enroll in other grade level optional credits provided prerequisites are met. Please refer to Level 10/30/40 course descriptions throughout this handbook**

Choir $20 S$ (1 credit) (Prerequisite: Choir 10S or by exception of instructor/principal) The Grade 10 Choir program is a continuation of Choir 10S. Students will continue to develop and improve the singing skills learned in earlier Choir classes. Different genres of music will be learned and sung. Along with singing various repertoire, this course also includes ear training and sight singing.

Computer Science 20S (1 credit) The emphasis in this course is on students learning to solve problems, accomplish tasks, and express creativity, both individually and collaboratively. Students will learn programming techniques and the syntax of one or more programming languages. More importantly, students will learn to adapt to changes in programming languages and learn new languages as they are developed. Computer science courses enable students to explore and develop skills in solving problems and prepare them for further studies at college or university.

## Concert Band 20S (1 credit) (Prerequisite: Concert Band 10S)

Students will develop their performing and ensemble skills sequentially through the grade 9, 10, 11, and 12 band courses. The music selections serve as the central course material and will advance as the grade level increases. These courses provide development in instrumental technique, reading skills, active listening skills, historical perspective, musicianship, expression, and creativity. Each grade level will perform and study music from diverse genres and periods in music history. Performance opportunities are available to the students in the form of clinics, workshops, festivals, day trips, and overnight trips. Band is accessible to all, and registrations are welcome from students who have not had the opportunity to be part of a band program previously.


#### Abstract

Foods and Nutrition 20G (1 credit) (Prerequisite: Foods 10 is recommended but not mandatory) This course focuses on the individual within the family unit and the influence that marketing and media have on family food choices. Students will gain a strong understanding of the categories of nutrients, why our bodies need them, and what foods are consumed for health and well-being. The course provides opportunities for students to further develop food preparation skills in a practical setting. A further focus will be to bring together multiple recipes prepared at the same time. Practical cooking of breakfast, lunch, and dinner options will be covered. Gluten-free options are available for most recipes.


**\$20.00 kitchen fee for food consumption

Fundamentals of Graphic Design 20S (1 credit) (Prerequisite: Exploration of Graphic Design 10S) Students taking graphic design programs should be considering a career or further education in the graphic design field. This course will allow students to expand the knowledge and skills acquired in the previous course, with emphasis on basic design theory, the design process, elements and principles of design, and practical application while using industry-level machinery and computer software. There will be a heavy emphasis on Adobe software throughout the course. Students are encouraged to think creatively and be able to work in small groups to solve design challenges. This course will have a final project/portfolio as the final assessment valued at $20 \%$ of the overall grade.
**Maximum student capacity per class of 16; $\$ 30.00$ fee for general usage. Additional fees may be required depending on usage and possible project ideas mentioned in class.

## Industrial Arts: Metalwork Technology 20G (1 credit)

(Prerequisite: Metalwork Technology 10G)

This course is divided into three main areas of study with hands-on application. The three main areas are welding, CNC design/operation, and manufacturing. The welding aspect is a continuation of the 10G course offered with students beginning different positions of welding. The CNC section introduces the design and operation of the machine/program and the basics of programming pieces to be cut for manufacturing. In the manufacturing area of the course, students are allowed to use their talents and problem-solving skills to design and build a project. . ${ }^{* *}$ Maximum student capacity per class of $16 .{ }^{* * * *} \mathbf{\$ 2 0 . 0 0}$ shop fee for materials used.**

> Jazz Band 20S (1 credit) (Prerequisite: Jazz Band 10S)
> Jazz band ensemble is designed for students who wish to perform in a specialized group studying the various styles of jazz music. Students will study and perform a variety of jazz selections with special attention given to technical competencies, jazz style, jazz concepts, jazz history, and improvisation. Emphasis will be placed on the development of instrumental techniques unique to jazz, as well as the understanding of the history, form, style, and orchestration of jazz. The music selections and improvisational skills will advance as the grade level increases. It is available to all band students in grades 9-12 and all students must participate in their respective grade-level concert bands. Concert band students are encouraged to register for this course regardless of previous jazz band experience.

## Personal Finance 20S (Prerequisite: None)

Personal Finance focuses on developing fundamental financial literacy skills, including the value of money, basic economics, budgeting, saving, financial institution services, and investing. This is especially relevant to high school students since they are entering the workforce and are considering future purchases that require financial planning, such as buying a car, traveling, or pursuing post-secondary education. Since financial literacy is a life skill, this course is a good option for all students.

[^2]Applied Mathematics 30S (1 credit) (Prerequisite: Intro to Applied \& PreCalculus Math 20S) Applied Mathematics 30S prepares students for the increased use of technology in society. Every effort is made to ensure the relevance of this course through the use of practical, applied PROBLEM-SOLVING techniques. In the Applied Mathematics curriculum, students gain and maintain essential skills in topic areas that are important in everyday life as well as in business and industry.<br>Topics include Systems of Linear Equations, Linear Programming, Non-Linear Functions, Personal Finance, Budgets and Investments, Geometry, Data Management, and Precision Measurement.<br>A graphing calculator is MANDATORY for this course. Students must have their OWN calculator available for use in each class. **A graphing calculator is required (TI-83 or higher) OR **APP on personal a device.

## Essential Math 30S (1 credit) (Prerequisite: Essential Math 20S)

Grade 11 Essential Math is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. The course attempts to use the working world of business as its examples. The usefulness of this course will extend past the walls of the school and be used in the student's day-to-day life. The materials that will be covered in the class throughout the year are Interest and credit, 3D Geometry, statistics, money management, relations and patterns, trigonometry, and design modeling. Students require an inexpensive geometry set and scientific calculator.


#### Abstract

English Language Arts: Literary Focus 30S (1 credit) (Prerequisite: English Language Arts 20F) The course is focused on providing students with the opportunity to develop specific strategies and skills to increase their ability, knowledge, and learning in the language arts. This is a specialized course designed for students to experience and produce $30 \%$ pragmatic material (created to provide information/opinion) and 70\% aesthetic material (created for literary enjoyment). Pragmatic material includes such forms as essays, editorials, news articles, documentaries, and reports. Aesthetic material includes such forms as novels, poems, short stories, films, drama, artwork, and photographs. Each sequence of study (thematically based) allows for the active use of the six language arts strands - speaking, listening, reading, writing, viewing, and representing.


## English Language Arts: Transactional Focus 30S (1 credit)

(Prerequisite: English Language Arts 20F)
The course is focused on providing students with the opportunity to develop specific strategies and skills to increase their ability, knowledge, and learning in the language arts. This is a specialized course designed for students to experience and produce $70 \%$ pragmatic material (created to provide information/opinion) and $30 \%$ aesthetic material (created for literary enjoyment). Pragmatic material includes such forms as essays, editorials, news articles, documentaries, and reports. Aesthetic material includes such forms as novels, poems, short stories, films, drama, artwork, and photographs. Each sequence of study (thematically based) allows for the active use of the six language arts strands - speaking, listening, reading, writing, viewing, and representing.

## History of Canada 30F (1 credit) (Prerequisite: Geography 20F)

History of Canada 30F has been designed to help us in the examination of the historical development of Canada, with a focus on social and political history. A further intent is to examine how Canada's history has developed and is developing within an international context. Some of the topics explored are First Peoples' history and contemporary issues, New France, British North America, government and politics, western expansion, and Canada's role in the world.

Physical Education/Health 30F (1 credit) (Prerequisite: Physical Education/Health 20F) This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them and to engage in active lifestyles into their futures. Students will study topics related to fitness management, mental health, substance use and abuse prevention, and the social impact of sports. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement the remaining course in a personal physical activity plan as part of the physical activity practicum. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. As well, specific sports training in Volleyball, Basketball, Hockey, Badminton and other sports will be pursued, including coaching strategies, training techniques, skill techniques, etc.

## Physical Education/Health 30F: Healthy Lifestyles Focus(1 credit)

(Prerequisite: Physical Education/Health 10F)
This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement a personal physical activity plan as part of a physical activity practicum.


#### Abstract

Physical Education/Health 30F Sport Specialization (1 credit) (Prerequisite: Physical Education/Health 10F) This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them and to specialize in school sports (volleyball, basketball, track, etc.). Students will study topics related to fitness management, mental health, substance use, and abuse prevention, and the social impact of sports. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement these strategies, skills, and physical requirements as they relate to the extra-curricular sports offered at WMCI. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. As well, specific sports training in Volleyball, Basketball, and other sports will be pursued, including coaching strategies, training techniques, skill techniques, etc.


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## Optional Credits

**Students can enroll in other grade level optional credits provided prerequisites are met. Please refer to Level 10/30/40 course descriptions throughout this handbook**

## Accounting 30S (1 credit) (Prerequisite: None)

Accounting 30 may be taken as a Senior III Math credit towards graduation, but students must have other Math credits as well for University/College entry. Students will be introduced to the accounting cycle for both sole proprietorships and partnerships including double-entry accounting, and preparation of fiscal statements. Other topics include banking, petty cash, and payroll. Once students are comfortable with written work, the Simply Accounting software package is introduced for computer-based accounting.
After completing this course, students have the option of continuing with a more in-depth look at accounting in the Accounting 40S course.

## Biology 30S (1 credit) (Prerequisite: Science 20F)

Biology 30S is an elective course at the Grade 11 level. This course studies the development of the human biological systems, including the cardiovascular system, the respiratory system, the muscular system, as well as many others. Biology 30 S also contains laboratory assignments including dissections of several key organs. Dissecting the organs is not required, as long as the student observes and assists.

## Chemistry 30S (1 credit)

## (Prerequisite: Science 20F; Pre-Calc 20S or Applied Math 20S recommended)

This first chemistry course assumes a basic understanding of atomic structure and the Periodic Table from Science 10 F and 20F as well as some familiarity with chemical formulae and nomenclature. Topics include the periodic table, atomic structure, chemical reaction and chemical bonding, organic chemistry, and basic gas and solution chemistry.
This course is needed for most post-high school science programs such as X-ray/lab technician, nursing, medicine, wildlife management, or veterinary studies, as well as being needed or desirable for agriculture, human ecology, medical/dental assistant training, etc. Good arithmetic skills are an asset but not critical.

Choir 30S (1 credit) (Prerequisite: Choir 20S)
The Grade 11 Choir program is a continuation of Choir 10S/20S. Students will continue to develop and improve their singing skills. Different genres of music will be sung. Along with singing various repertoire, this course also includes ear training and sight singing.

## Concert Band 30S (1 credit) (Prerequisite: Band 20S)

Students will develop their performing and ensemble skills sequentially through the grade 9, 10, 11, and 12 band courses. The music selections serve as the central course material and will advance as the grade level increases. These courses provide development in instrumental technique, reading skills, active listening skills, historical perspective, musicianship, expression, and creativity. Each grade level will perform and study music from diverse genres and periods in music history. Performance opportunities are available to the students in the form of clinics, workshops, festivals, day trips, and overnight trips. Band is accessible to all, and registrations are welcome from students who have not had the opportunity to be part of a band program previously.

## Current Topics in Science 30 S (1 credit)

This course is designed to allow students to build their scientific research and inquiry skills using project-based learning. By studying current and exciting topics students will learn to distinguish between science and technology and learn about the relationship between the two. Students will learn how culture and science influence each other.

## Industrial Arts: Metalwork Technology 30G (1 credit)

(Prerequisite: Metalwork Technology 10G and 20G)
This course is designed for students who are considering a career in the field of metalworking. It is a project-based course that will build upon skills learned in previous courses and problem-solving skills. Project work is based on design, manufacturing, welding, machining, and CNC work. Project design and work is the major focus. If you enjoy creating, designing, and seeing your ideas come together, this course may be just for you.
**Maximum student capacity per class of 16.** **\$20.00 shop fee for materials used.**


#### Abstract

Jazz Band 30S (1 credit) (Prerequisite: Jazz Band 20S) Jazz band ensemble is designed for students who wish to perform in a specialized group studying the various styles of jazz music. Students will study and perform a variety of jazz selections with special attention given to technical competencies, jazz style, jazz concepts, jazz history, and improvisation. Emphasis will be placed on the development of instrumental techniques unique to jazz, as well as the understanding of the history, form, style, and orchestration of jazz. The music selections and improvisational skills will advance as the grade level increases. It is available to all band students in grades 9-12 and all students must participate in their respective grade-level concert bands. Concert band students are encouraged to register for this course regardless of previous jazz band experience.


## Physics 30S (1 credit)

(Prerequisite: Science 20F; Intro to Applied \& Pre-Calculus Math 20S recommended)
This course includes an introductory survey of the nature of Physics, measurement of physical quantities, and the use of vectors. Areas of study also include the analysis of motion, the causes of motion (dynamics), electricity, magnetism, and basic wave phenomena. Strong math abilities and problem-solving skills are necessary.
*This course is only offered every second year so will not be available again until 2026/2027 school year.

## Applied Mathematics 40S (1 credit) (Prerequisite: Applied Mathematics 30S)

Applied Mathematics 40S prepares students for the increased use of technology in society. Every effort is made to ensure the relevance of this course through the use of practical, applied PROBLEM-SOLVING techniques. In the Applied Mathematics curriculum, students gain and maintain essential skills in topic areas that are important in everyday life as well as in business and industry.
Topics include Design \& Measurement, Matrix Modelling, Vectors, Applications of Periodic Functions, Probability, Personal Finance, Sequences, and Variability \& Statistical Analysis.
A graphing calculator is MANDATORY for this course. Students must have their OWN calculator available for use in each class. **A graphing calculator is required (TI-83 or higher) OR **APP on personal device.
**There is a final Provincial exam in this course.**


#### Abstract

English Language Arts: Literary Focus 40 (1 credit) (Prerequisite: ELA: Literary 30S) This course enables students to become competent and confident users of all six language arts through opportunities to listen, speak, read, write, view, and represent in a variety of combinations and through a wide range of relevant texts including short stories, novels, poetry, songs, drama, and film study. Learning outcomes involve the knowledge, skills, strategies, and attitudes students demonstrate emphasizing expressive purposes and texts. Texts read and produced are approximately 70 percent expressive and 30 percent practical in purpose. **There is a final Provincial exam in this course.**


## English Language Arts: Transactional Focus 40S (1 credit) <br> (Prerequisite: ELA 30S: Transactional or Literary) <br> This course enables students to become competent and confident users of all six language arts through opportunities to listen, speak, read, write, view and represent in a variety of combinations through a wide range of relevant texts (materials). In the transactional focus, students develop and refine a range of knowledge, skills, and strategies to help them function effectively in their post-high school lives. This course emphasizes the practical uses of language: language that informs, directs, persuades, analyzes, argues, and explains. Assignments include essays, letters, reports, editorials, reviews, questionnaires, and interviews. <br> **There is a final Provincial exam in this course.**

## Essential Mathematics 40S (1 credit) (Prerequisite: Essential Math 30S)

This course gives students an understanding of how mathematical concepts affect our daily life, business, industry, and government. Units covered include vehicle finance, home finance, business finance, statistics, precision measurement, career life, geometry and trigonometry, and probability. Students will develop the ability to make reasoned decisions and to support those decisions mathematically. This course, like Essential 30S, is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. **There is a final Provincial exam in this course.**

Physical Education/Health 40F (1 credit) (Prerequisite: Physical Education/Health 30F) This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them and to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement a personal physical activity plan as part of a physical activity practicum. Students will be introduced to risk management planning to minimize the associated risks of the activities they have chosen. As well, specific sports training in Volleyball, Basketball, Hockey, Badminton, and other sports will be pursued, including coaching strategies, training techniques, skill techniques, etc.

Physical Education/Health 40F: Healthy Lifestyles Focus(1 credit)<br>(Prerequisite: Physical Education/Health 30F)<br>This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them, and to engage in active lifestyles into their futures. Students will study topics related to fitness management, nutrition, sexual health, social/emotional health, and personal development. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement a personal physical activity plan as part of a physical activity practicum.

## Physical Education/Health 40F Sport Specialization (1 credit)

## (Prerequisite: Physical Education/Health 30F)

This compulsory full-credit course is designed to help youth take greater ownership of their physical fitness, to encourage them to seek out activities that interest them, and to specialize in school sports (volleyball, basketball, track, etc.). Students will study topics related to fitness management, mental health, substance use, and abuse prevention, and the social impact of sports. The focus of this content will be on health and personal planning. These topics will make up the core component of the course content. Students will be required to develop and implement these strategies, skills, and physical requirements as they relate to the extra-curricular sports offered at WMCI. Students will be introduced to safety and risk management planning to minimize the associated risks of the activities they have chosen. As well, specific sports training in Volleyball, Basketball, and other sports will be pursued, including coaching strategies, training techniques, skill techniques, etc.

## Pre-Calculus Mathematics 40S (1 credit) (Prerequisite: Pre-Calculus Mathematics 30S)

Pre-Calculus Math is a "pure" math course and is meant primarily for students who plan on taking Calculus (and related disciplines) when in post-secondary education. Pre-Calculus 40 S builds upon the previous foundations of abstract and theoretical situations considered in prior Pre-Calculus courses.
Reasoning and logical thinking are required for a complete understanding of this course. This course develops good thinking and learning skills through the application of basic ideas to a variety of problems. Due to the challenging and demanding nature of Pre-Calculus 40S, students are expected to work hard and think for themselves. Topics include Circular Functions, Exponents \& Logarithms, Transformations, Trigonometric Identities, and Permutations, Combinations \& Binomial Theorem. ${ }^{* *}$ A scientific calculator is required OR **APP on a personal device.
**There is a final Provincial exam in this course.**

## Level 40 (Grade 12)

## Optional Credits

**Students can enroll in other grade level optional credits provided prerequisites are met. Please refer to Level 10/20/30 course descriptions throughout this handbook**

> Applied Technology 40S: Advanced Metalwork ( 1 credit) (Prerequisite: Metalwork Technology 40) This course is intended for students who are seriously considering a career in the metals industry or looking towards post-secondary schooling to obtain level standing. The two major aspects of this course are welding and project work. The emphasis in welding will be on the application of various rods, currents, systems, and welding positions. The welding of various metals may also be covered.
> $* *$ Maximum student capacity per class of $16 .{ }^{* * * * \$ 20.00 \text { shop fee for materials used.** }}$

Biology 40S (1 credit) (Prerequisite: Biology 30S is recommended but not required.)
The course studies biodiversity, investigating genetics, microbiology, plant diversity, animal diversity, and ecology. In addition to coursework and research, Biology 40S also has a laboratory component that includes comparative physiology and dissection. It should be noted that dissecting is not required, as long as the student observes and assists. Upon completing the course, students will be prepared to study biology at the University level.

## Chemistry 40S (1 credit)

(Prerequisite: Chemistry 30S; Pre-Calculus 30S or Applied Math 30S recommended)
This course includes further studies of the Periodic Table, kinetics, equilibrium in acids, bases, solutions, and heterogeneous systems as well as electrochemistry. Chemistry 40S is widely useful in post-high school chemistry and biology-based careers and is a usual pre-requisite for any further study in chemistry or biochemistry fields.

## Choir 40S (1 credit) (Prerequisite: Choir 30S)

The Grade 12 Choir program is a continuation of Choir 10S/20S/30S. Students will continue to develop and improve their singing skills. Different genres of music will be sung. Along with singing various repertoire, this course also includes ear training and sight singing.

## Concert Band 40S (1 credit) (Prerequisite: Concert Band 30S)

Students will develop their performing and ensemble skills sequentially through the grade 9, 10, 11, and 12 band courses. The music selections serve as the central course material and will advance as the grade level increases. These courses provide development in instrumental technique, reading skills, active listening skills, historical perspective, musicianship, expression, and creativity. Each grade level will perform and study music from diverse genres and periods in music history. Performance opportunities are available to the students in the form of clinics, workshops, festivals, day trips, and overnight trips. Band is accessible to all, and registrations are welcome from students who have not had the opportunity to be part of a band program previously.

Current Topics in First Nations, Métis, and Inuit Studies 40S (1 credit) (Prerequisite: None) This course supports the empowerment of students through the exploration of the histories, traditions, cultures, worldviews, and contemporary issues of Indigenous peoples in Canada and worldwide. Students gain knowledge and develop the values, as well as the critical thinking, communication, analytical, and inquiry skills that will enable them to better understand past and present realities of Indigenous peoples. Additionally, exploration of topics such as self-determination, self-government, and language and cultural reclamation allows students to understand and work towards the post-colonial future envisioned by Indigenous peoples.

## Family Studies 40S (1 credit) (Prerequisite: None)

Family Studies emphasizes the transition from adolescence to adulthood with the ability to examine and practice skills that help develop healthy interpersonal relationships. The skills and knowledge will provide the opportunity for students to make informed and responsible life management choices now and in the future. Career pathways in family studies include social science and humanities areas such as early childhood education, child and adolescent development, teaching/education, public policy and law, aging, financial planning, social work, counseling, psychology, public health, advocacy, non-profit work, and family life and parenting.

## Foods \& Nutrition 40 (1 credit) (Prerequisite: Foods \& Nutrition 20G or 30S)

Food and Nutrition is a critical examination of the individual as a responsible citizen. This course will explore sustainability and ethical practices within food production and access. Students will examine food security and the barriers that exist to achieve food security for all people. Students will investigate solutions to local and global food accessibility. This course will provide the opportunity for students to apply food preparation skills in a practical setting. Areas of practical preparation are breakfast and dairy options, as well as patisserie and baking. Gluten-free options are available depending on the recipe.
**\$30.00 kitchen fee

## Industrial Arts: Metalwork Technology 40S (1 credit)

(Prerequisites: 10G, 20G, 30G Metalwork Technology)
This course is designed for students seriously exploring various careers in the metalworking industry. It is a project/problem-solving-based course that will develop and build many skills. Students will gain skills in aluminum welding, TIG welding, and out-of-position welding on various machines. Many skills gained during Grades 10 and 11 will be further enhanced and students create projects using all parts and machines in the shop.
**Maximum student capacity per class of 16. ***\$20.00 shop fee for materials used.**

## Intro to Calculus and Advanced Math (40S)(Prerequisite: PreCalculus 40S recommended)

This is an optional course and does not qualify for the compulsory Grade 12 Mathematics credit. It is intended for students who have completed or are completing their compulsory Grade 12 Mathematics credit (usually Pre-Calculus Mathematics 40S). It is designed for students who show an aptitude for, or a strong interest in, mathematics and plan to study further mathematics at the post-secondary level. This course will introduce some of the topics that will be covered in the first year of university mathematics including limits, derivatives, integrals, matrix operations, statistics and vectors; and may include number theory, conic sections, or 3D spatial geometry as time allows

## Jazz Band 40S (1 credit) (Prerequisite: Jazz Band 30S)

Jazz band ensemble is designed for students who wish to perform in a specialized group studying the various styles of jazz music. Students will study and perform a variety of jazz selections with special attention given to technical competencies, jazz style, jazz concepts, jazz history, and improvisation. Emphasis will be placed on the development of instrumental techniques unique to jazz, as well as the understanding of the history, form, style, and orchestration of jazz. The music selections and improvisational skills will advance as the grade level increases. It is available to all band students in grades $9-12$ and all students must participate in their respective grade-level concert bands. Concert band students are encouraged to register for this course regardless of previous jazz band experience.

## Physics 40S (1 credit)

(Prerequisite: Physics 30S; Pre-Calculus Math 30S or Applied Math 30S highly recommended) Physics 40S continues the investigation of relationships in the graphical, numerical, symbolic, and physical conceptual modes with increased emphasis on the mathematical aspects of the relationships between scientific variables. Topics include circular motion, forces at oblique angles, and inversely related quantities. Further examination of accelerated motion, graphical analysis of motion and electromagnetism, and waves are included.

## Psychology 40S (Prerequisite: None)

Psychology is the scientific study of behavior and mental processes. It uses the scientific method to discover ways of understanding the complexities of human thought and behavior, as well as differences among people. Studying psychology gives students lifelong skills such as dealing with issues proactively, solving problems, learning, and nurturing healthy relationships. It helps students understand themselves, and deal with issues in their own lives such as inner conflict, relationships with parents and peers, and intimacy. It also helps students understand societal problems like drug dependency, aggression, and discrimination.

> Visual Arts 40S (1 credit) (Prerequisite: Art 20G or 30S or an interview with teacher and art samples) This course is about ideas, expression, the tools artists use, and the process they go through to create their art. Vital to a student's learning is their preliminary work, the process that leads to and solidifies a student's artistic decisions. Producing their works of art, students will experiment with a variety of art materials and techniques. Students will continue to study the fundamentals of design in more depth than in previous years. Drawing and painting continue to be the core area of emphasis although students will be able to explore other art forms on an individual basis. Students will also be required to explain the artistic process in detail through interviews, self-evaluative forms, reflection, and journaling. Students will be required to complete several projects throughout the year, as well as keep an up-to-date art portfolio (a collection of carefully labeled student artwork) and a journal that details student learning. A final assessment will include the portfolio and in-class projects that demonstrate the student's abilities to use a variety of media during the final weeks leading to the end of the course. The final assessment includes the portfolio, final projects, and an in-class test on tools, color theory, and processes that are valued at $30 \%$ of the overall grade.
> **Maximum student capacity per class of $20 ; \$ 30.00$ fee for starter supply kit and general usage. Additional fees may be required depending on usage and possible project ideas mentioned in class.

## Western Civilization 40 (Prerequisite: History 30S)

This curriculum is designed to help students understand that Canadian society and other Western societies evolved and were shaped by complex movements and events. We will do a deep dive into ancient Greece, Mesopotamia and Rome followed by an overview of European history. Any student who would like to travel on an EF Tour or take a history class at a higher level should consider this course. Completion of this credit will make you eligible for a few scholarships and entrance requirements for some university programs.

OTHER WAYS TO EARN CREDITS......
CADETS: Earn up to 2 credits. These credits can not be used towards the 30 required credits towards graduation.
PRIVATE MUSIC OPTION: See http://www.edu.gov.mb.ca/k12/cur/arts/music/pmo.html
CHALLENGE FOR CREDIT: See http://www.edu.gov.mb.ca/k12/policy/gradreg/choice attacha.pdf
VOLUNTEER CREDITS: Students can earn .5 credit at both the $30 \& 40$ level. 55 hours/ .5 credit CULTURAL EXPLORATION STUDENT-INITIATED PROJECT: See
http://www.edu.gov.mb.ca/k12/policy/sics sips.html\#comservice
DISTANCE LEARNING: See http://www.edu.gov.mb.ca/k12/docs/policy/online learning
POST-SECONDARY AND HIGH SCHOOL DUAL CREDITS: You may take post-secondary courses while in high school. http://www.edu.gov.mb.ca/k12/policy/gradreq/dc guide 10.pdf

SPECIAL LANGUAGE CREDIT OPTION: See http://www.edu.gov.mb.ca/k12/docs/policy/lancredits
CREDIT FOR EMPLOYMENT: Contact Mrs. Smith
TEACHER MEDITATED OPTION: Contact Mrs. Smith


[^0]:    Jazz Band 10S (1 credit) (Current Concert Band registration unless exception by instructor/principal) Jazz band ensemble is designed for students who wish to perform in a specialized group studying the various styles of jazz music. Students will study and perform a variety of jazz selections with special attention given to technical competencies, jazz style, jazz concepts, jazz history, and improvisation. Emphasis will be placed on the development of instrumental techniques unique to jazz, as well as the understanding of the history, form, style, and orchestration of jazz. The music selections and improvisational skills will advance as the grade level increases. It is available to all band students in grades 9-12 and all students must participate in their respective grade-level concert bands. Concert band students are encouraged to register for this course regardless of previous jazz band experience.

[^1]:    Physical Education/Health 20F (1 credit) (Prerequisite: Physical Education/Health 10F) Physical Education 20F builds upon the foundation developed in Physical Education 10F. More advanced movement patterns in team sports, as well as advanced skill development in individual sports, are emphasized. Students should also be able to show a marked improvement in personal fitness levels throughout the year and to understand the principles responsible. Again, the main focus is on the importance of participation for a healthy lifestyle.
    Health at the 20F level makes up one-half of the Physical Education 20F credit. An important goal of this course is to help the students take responsibility for their actions and their health. To achieve this, the students are involved in many group activities and discussions on topics of interest to them. Units of study include Contributing to the Community, Responsibility to Self and Others, Responsible Sexual Behaviour (with emphasis on abstinence), Mental Health (especially body image), Transitions (Family life stages), and Technology Safety (CyberSafety).

[^2]:    Visual Arts 20S (1 credit) (Prerequisite: Art 10G or an interview with teacher and art samples)
    This course is about ideas, expression, the tools artists use, and the process they go through to create their art. Vital to a student's learning is their preliminary work, the process that leads to and solidifies a student's artistic decisions. Producing their works of art, students will experiment with a variety of art materials and techniques. Students will also be required to explain the artistic process in detail through interviews, self-evaluative forms, reflection, and journaling. Students will be required to complete several projects through the course of the year as well as keeping an up-to-date art portfolio (a collection of carefully labeled student artwork) and a journal that details student learning.
    **Maximum student capacity per class of $20 ; \mathbf{2 5 . 0 0}$ fee for starter supply kit and general usage. Additional fees may be required depending on usage and possible project ideas mentioned in class.

[^3]:    Pre-Calculus Mathematics 30S (1 credit) (Prerequisite: Intro to Applied \& Pre-Calculus Math 20S) Pre-Calculus Math is a "pure" math course and is meant primarily for students who plan on taking Calculus (and related disciplines) when in post-secondary education. Precalculus $30 S$ builds upon the previous foundations of abstract and theoretical situations considered in the Intro to Applied \& Pre-Calculus 20S course. Reasoning and logical thinking are required for a complete understanding of this course. This course develops good thinking and learning skills through the application of basic ideas to a variety of problems. Due to the challenging and demanding nature of Precalculus 30S, students are expected to work hard and think for themselves. Topics include Quadratic Functions, Algebra, Functions, Trigonometry, Analytic Geometry, Consumer Math, Geometry, Logic \& Proof. **A scientific calculator is required OR **APP on personal a device.

