



Musquodoboit Rural High School  
Course and Program Handbook  
2017-2018

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# Musquodoboit Rural High School Course Handbook

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## Purpose

The purpose of this course handbook is to provide an overview of the courses and programs offered at Musquodoboit Rural High School for the 2015-2016 school year. Every effort has been made to accurately describe the courses and programs that will be available. However, students should be aware that student population and staffing considerations may change the selection of courses that can ultimately be offered for 2015-16 at MRHS.

Students are asked to choose carefully, keeping the following guidelines in mind:

- Graduation requirements
- Personal interests and abilities
- The entrance requirements for post-secondary education
- Whether courses have pre-requisites
- The advice provided by current teachers regarding next year's course demands

### Note:

- Grade 10 and 11 students must take a full course load.
- Grade 12 students who are eligible to graduate must take at least 3 courses each semester they are attending school.
- Students will only be permitted to make a change within two weeks of the beginning of each semester to change courses. However, such changes can **only** be made in exceptional circumstances and **only** if numbers allow.
- After the first two weeks of the semester, students will not be permitted to change courses, except with teacher recommendation and administrative approval.
- Because of the limited number of courses available, students who are not successful in compulsory courses may experience difficulty in selecting appropriate courses in subsequent years and may not be able to graduate after three years of high school.

## Recommendations for Courses

At MRHS, we strive to set up every student for success. Based on a student's acquisition of skills and their performance in a course, teachers may make recommendations for subsequent courses. While parents can choose to override the teacher recommendation, students may not experience the same level of success in their chosen course.

## Marks on Transcripts

Please note that every course in which a student enrolls will appear on an official transcript, irrespective of the mark achieved or the number of times a course is taken.

Transcripts will indicate any courses in which students are working on individual program plans.

## COURSE LOAD REQUIREMENT

Unless there are extenuating circumstances:

All students in Grades 10 and 11 must enroll in a full set of courses, with no unscheduled periods.

Students in Grade 12 may request unscheduled periods as follows, based on the number of credits obtained by the end of Grade 11:

- 13 or more credits ..... Two unscheduled periods, one in each semester, if desired.
- 12 credits ..... One unscheduled period, in one of the two semesters, if desired.
- 11 or fewer credits ..... No unscheduled periods are permitted.

## Course Registration Process

Students who are already students in Musquodoboit Rural High School in Grades 9 to 11 will go through the course selection process during the months of March and April. The guidance counsellor will present an orientation session outlining or reviewing the credit system, graduation requirements and as well special features and requirements for various programs including O2 and Integrated French.

At the conclusion of the orientation students receive a course selection form to be completed within approximately one week and returned to a designated staff member. Students select courses within a previously determined timetable, so that they select a course from each of the eight timetable slots (four per semester). Students must first select courses that are required for graduation and/or for a special program in which they are enrolled. Choices are limited by that restriction. For example if a student requires Canadian History 11, it must be selected and other courses found in that timetable slot will not be able to be taken. For this reason the selection available to students varies widely depending on individual program needs. Course selection sheets will guide each category of student through the selection process. These details are not repeated in this booklet; however all students regardless of program must as much as possible choose courses that yield credits required for graduation.

## Requirements to Graduate

Students require a minimum of 18 credits to graduate. No more than **seven** of the eighteen credits may be grade 10 courses and at least **five** must be grade 12 courses.

The following 13 credits are compulsory for graduation:

- 3 English language arts, one at each grade level
- 1 fine arts
- 2 mathematics, at different grade levels
- 2 sciences, an introductory science and one other approved science
- 2 other credits from math, science or technology
- 1 Physical education course
- 1 Global studies course
- 1 Canadian studies course

Students may choose which other courses to take to fulfill the requirement for 18 credits.

*Definition of a credit:* A credit is awarded in recognition of the successful completion of an approved course that would normally be completed in a minimum of 110 hours of scheduled time. In courses defined through curriculum outcomes, students are expected to have demonstrated achievement of the outcomes at an acceptable level of proficiency.

*Credit types:* Each course is categorized as one of the following credit types:

**Advanced** – Courses designed to meet the needs of students who have demonstrated an exceptional degree of academic ability or achievement.

**Academic** – Courses designed for students who expect to enter college, university or other post-secondary institutions.

**Graduation** – Courses designed for students who wish to obtain a graduation diploma proceed to employment or some selected area of post-secondary study.

**Open** – Although none of these courses are designed to meet the specific entrance requirements of any post-secondary institution, individual courses may meet the entrance requirements of some institutions.

## Course Descriptions

### **English Language Arts Courses**

**Students must obtain three credits in English language arts, one at each of the three grade levels. The academic English stream is a necessity for entry into any university program in this region, and as well for several community college and private college programs.**

#### **English 10** (academic, 1 credit)

This course offers abundant opportunities for students to read widely, write frequently, explore a wide range of print and visual texts, work independently as well as collaboratively in small groups, and to design learning tasks that are of particular interest to them. Students who also enrol in Music 10 will normally take this course in an all-year section alternating by days with the Music class.

#### **English 11** (academic, 1 credit)

*Pre-requisite: English 10*

This course is intended for students whose goals include post-secondary studies. This course emphasizes literary texts, with opportunities to select texts for independent study and small group inquiry in ways that extend the students knowledge base, thinking strategies, self-awareness and insights. Students who also enroll in Music 11 will normally take this course in an all-year section alternating by days with the Music class.

#### **English Communications 11** (graduation, 1 credit)

*Pre-requisite: English 10*

This course is intended to prepare students for lifelong learning by engaging them in practical and interesting learning experiences closely related to their lives and to the world they will experience as adults. It focuses on developing language skills necessary for the workplace.

#### **English 12** (academic, 1 credit)

*Pre-requisite: English 11*

This course is intended for students whose goals include post-secondary studies. This course continues to emphasize literary texts, with opportunities to select texts for independent study and small group inquiry in ways that extend the students knowledge base, thinking strategies, self-awareness and insights.

#### **English Communications 12** (graduation, 1 credit)

*Pre-requisite: English 11 or English Communications 11*

This course is intended to prepare students for lifelong learning by engaging them in practical and interesting learning experiences closely related to their lives and to the world they will experience as adults. It continues to focus on developing language skills necessary for the workplace.

#### **English 12 African Heritage** (academic, 1 credit)

This course is designed to prepare students to meet key stage outcomes for Grade 12: Speaking and Listening: This course will engage students in a critical and analytical response to numerous literary genres and texts, using an Afrocentric focus. Students are given increased opportunities to demonstrate their ability as thoughtful, critical readers/viewers of literary and other texts. Students will continue to develop written and oral fluency through a wide variety of assignments, which will enable them to communicate confidently and effectively. Note: Meets Grade 12 English Requirement and serves as a pre-requisite for post-secondary study at the university level.

# **Integrated French Language Courses**

## **Senior High School Integrated French Program (“Extended Core”)**

**MRHS offers the Integrated French program to students who have completed its junior high school counterpart or who have a similar facility in the French language obtained elsewhere. At present there is no course available to those who followed the core French program in junior high school.**

Upon graduation, students who have completed this program will receive a special certificate additional to the high school graduation diploma. Apart from the level of facility in French achieved, the student will be able to use this certificate in a portfolio, and can refer to it in any future resume.

This program consists of a set of six French-language courses, with two being taken each year. Each year consists of a French language arts course, normally taken in the first semester, followed by a subject class taken in the second semester. In each case **the subject area** course is one that also meets the requirements for particular subjects leading towards high school graduation.

Currently the three subject area courses, and the specific requirement each meet are as follows: Physically Active Living 11 (Physical Education credit), Canadian History 11 (Canadian history credit) and Global Geography 12 (Global studies credit). The courses taught are the French language equivalents of these courses. The effect is that each of these courses meets two requirements: three specified credits for graduation, and three credits towards the Integrated French certificate.

Due to class size considerations MRHS normally offers only one of the three subject area classes in any particular year, in a rotation, so that by the end of Grade 12 all three have been taken. **In 2015-16 all Integrated French students will take Histoire du Canada 11.**

### **Integrated French 10** (academic, 1 credit)

*Pre-requisite: Participation in Integrated French program in junior high school*

This course is designed to develop comprehension, communication and interaction skills and strategies through experiences and materials that incorporate a variety of authentic documents. Topics, tasks and final projects are aligned with student’s experiences and interests.

### **Integrated French 11** (academic, 1 credit)

*Pre-requisite: Integrated French 10*

This course is designed to continue to develop comprehension, communication and interaction skills and strategies through experiences and materials that incorporate a variety of authentic documents. Topics, tasks and final projects are aligned with student’s experiences and interests.

### **Integrated French 12** (academic, 1 credit)

*Pre-requisite: Integrated French 11*

This course is designed to further develop comprehension, communication and interaction skills and strategies through experiences and materials that incorporate a variety of authentic documents. Topics, tasks and final projects are aligned with student’s experiences and interests.

### **Mode de vie actif 11** (open, 1 credit)

*Pre-requisite: Participation in Integrated French program*

This course is designed to engage in a wide range of physically active experiences, with the overall theme of exploring options and opportunities for being physically active for life, both at school and in the community. The activity component of the course is designed to provide opportunities for students in active experiences that engage youth in traditional and non-traditional forms of physical activity. The theory component will enhance student understanding of healthy eating, injury prevention, mental and emotional health, and addiction prevention, highlighting the connection between healthy living and being physically active. **It is anticipated that all Integrated French students will take this course in 2017-18.**

**Histoire du Canada 11** (academic, 1 credit)

*Pre-requisite: Participation in Integrated French program*

It is organized around five continuing or persistent questions that have deep historical roots that previous generations of Canadians have had to address. Their efforts have shaped the development of Canada and its identity. The units of study in this course are Globalization, Development, Sovereignty, Governance, Justice and an Independent Study. **All Integrated French students will take this course in 2018-19.**

**Géographie Planétaire 12** (academic, 1 credit)

*Pre-requisite: Participation in Integrated French program*

This course focuses on global geography, and explores major themes that help us to understand the nature and origins of complex humanity/environment relationships in the contemporary world. **It is anticipated that all Integrated French students will take this course in 2016-17.**

# Mathematics Courses

Students must complete at least two mathematics credits, at each of the Grade 10 and 11 levels, in order to graduate. Please note that additional mathematics credits may be used to meet the 2-credit Technology/Math/Science requirement.

All mathematics courses have a duration of 110 hours and yield one credit, with the exception of Mathematics 10 (Academic), which has a duration of 220 hours (spanning the complete school year) and yields one mathematics credit and one elective credit.

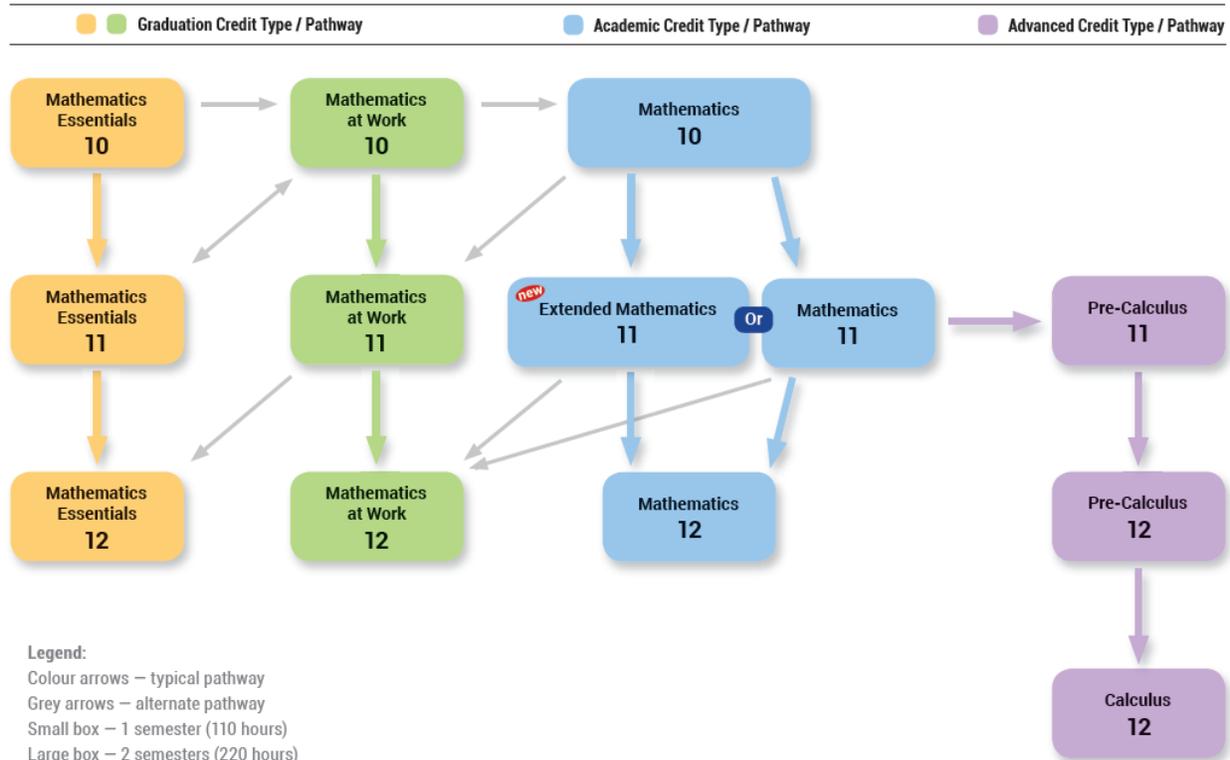
The choice of the most appropriate mathematics course is the most crucial decision on entry into high school. Currently there is no prerequisite for any of the three mathematics streams but nevertheless all students and parents/guardians must make the best possible choice. For some the automatic choice is the academic mathematics option due to the reality that if completed it does keep the most doors open. It is a reality that on entry into Grade 10 there is a range of abilities, backgrounds and levels of interest in mathematics, and therefore it is also a reality that levels of success vary widely. Students and parents/guardians must make realistic choices based on these factors.

This chart shows the mathematics pathways through high school for students who commence Grade 10 beginning in 2013 or 2014. Students who commenced Grade 10 in 2012 or earlier are following previous pathways being replaced by what is shown here.

## Senior High Mathematics Course Pathways



Effective: 2017–18 School Year



Generally speaking it can be said that the **Mathematics Essentials path** will be suitable for those who will not in the future follow a technical college program or university education. Mathematics Essentials is recommended to those students who have experienced significant difficulty in the Grade 9 mathematics course. The **Mathematics at Work pathway** is suitable for those who passed Grade 9 mathematics at a moderate level and are interested in going on to trades training or college programs in general.

**Academic Mathematics** is suitable for those who had good results in Grade nine mathematics and plan to go on to university or into technology and health science programs at college such as in electronics and practical nursing. **The precalculus route** that branches off from the academic stream in Grade 11 is generally required for entry into, and success within, university programs in science, engineering and subsequent professional programs such as in medicine and dentistry.

**Math recommendation forms** are issued to Grade 9 students and parents/guardians during the selection process. These may be followed or not followed but should be seriously considered in the selection decision. A similar form may be issued in Grade 10 and/or 11.

#### **Mathematics 10** (academic, 2 credits – 1 Math, 1 elective Credit)

Successful completion of Grade 9 Mathematics with good marks and a recommendation from the Grade 9 teacher is the best indicator of success in this course. Unlike other courses in the senior high school, this course spans the whole year and yields two credits towards graduation (1 mathematics credit and 1 elective credit – students receive both credits if they are successful; none if they are not.)

Mathematics 10 is designed to provide students with an initial course in the pathway to develop mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require an academic or Pre-Calculus mathematics credit.

Students will explore the following topics: measurement systems, surface area and volume, right triangle trigonometry, exponents and radicals, polynomials, linear relations and functions, linear equations and graphs, solving systems of equations, and financial mathematics.

#### **Mathematics at Work 10** (graduation, 1 credit)

Successful completion of Grade 9 Mathematics is a good predictor of success in this course.

Mathematics at Work 10 is a course designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force or for entry into programs of study that do not require *academic* mathematics.

Students will explore the following topics: measurement, area, Pythagorean theorem, right triangle trigonometry, geometry, unit pricing and currency exchange, income, and basic algebra.

#### **Mathematics Essentials 10** (graduation, 1 credit)

Students entering senior high school without having met the requirements in Grade 9 Mathematics must take this course, and it is also available to others. Mathematics Essentials 10 is designed to provide students with the development of the skills and understandings required in the workplace, as well as those required for everyday life at home and in the community. Students will explore the following topics: mental math, working and earning, deductions and expenses, paying taxes, making purchases, buying decisions, probability, measuring and estimating, transformation and design, and buying a car.

Students who complete this course normally progress in second semester to Mathematics Essentials 11; however some who experience great success may wish to recommence the mathematics program with Mathematics at Work 10, in which case Mathematics Essentials 10 will count as an elective credit.

#### **Mathematics 11** (academic, 1 credit)

**Pre-requisite:** Successful completion of Mathematics 10.

- Students who select Mathematics 11 should have a solid understanding of the Mathematics 10 curriculum. Mathematics 11 is a prerequisite for Pre-calculus 11. These courses are to be taken consecutively, not concurrently.

- There are two typical pathways for students who successfully complete Mathematics 11: o For those students intending to follow the academic pathway, Mathematics 11 will be followed Mathematics 12 in the Grade 12 year. (Mathematics 11 and Mathematics 12 are designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require an academic or Pre-calculus mathematics credit)

o For those students intending to follow the advanced pathway, Mathematics 11 will be followed in the second semester of the Grade 11 year by Pre-calculus 11, and then Pre-calculus 12 in Semester 1 of the Grade 12 year, and optionally, Calculus 12 in the Second Semester of Grade 12.

o Alternatively, students who successfully complete Mathematics 11 may choose to select a graduation level course in grade 12.

• Students in Mathematics 11 will explore the following topics:

o applications of rates, scale diagrams and factors, inductive and deductive reasoning, an introduction to proof, cosine law, sine law, spatial reasoning, statistics, systems of linear inequalities, and quadratic functions.

### **Pre-Calculus Mathematics 11** (advanced, 1 credit)

**Prerequisite:** Successful completion of Mathematics 11 (preferably with the recommendation of the Mathematics 11 teacher)

Pre-calculus 11 is an advanced high school mathematics course intended for students who plan to advance to post-secondary programs in Science and Engineering, and some Commerce programs. This path is not required for students intending to enroll in a nursing program.

• Students who select Pre-calculus 11 should have a solid understanding of the Mathematics 11 curriculum.

• Pre-calculus 11 is a prerequisite for Pre-calculus 12. These courses are to be taken consecutively, not concurrently.

o The typical pathway for students who successfully complete Pre-calculus 11 is Pre-calculus 12.

(Courses in the Pre-calculus pathway are designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require the study of theoretical calculus.)

o Some students who successfully complete Pre-calculus 11 may choose to take Mathematics 12.

o Alternatively, students who successfully complete Pre-calculus 11 may choose to select a graduation credit in grade 12.

• Students in Pre-calculus 11 will explore the following topics:

o Absolute value, radical expressions and equations, rational expressions and equations, angles in standard position, analyze and solve quadratic equations, linear and quadratic equations and inequalities in two variables, arithmetic and geometric sequences, and reciprocals of linear and quadratic functions.

### **Mathematics at Work 11** (graduation, 1 credit)

**Pre-requisite:** Successful completion of Mathematics at Work 10 or Mathematics 10.

Mathematics at Work 11 demonstrates the application and importance of key mathematical skills.

• The typical pathway for students who successfully complete Mathematics at Work 11 is Mathematics at Work 12. (The Mathematics at Work pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force or for entry into programs of study that do not require academic mathematics.)

• Some students who successfully complete Mathematics at Work 11 may choose to take Mathematics for the Workplace 12.

• Students in Mathematics at Work 11 will explore the following topics: o measurement systems volume, 2-D and 3-D geometry, scale, exploded diagrams, numerical reasoning, personal budgets, compound interest, financial institution services, and formula manipulation for various contexts.

### **Mathematics Essentials 11** (graduation, 1 credit)

*Pre-requisite: Mathematics Essentials 10*

Students in this course will explore the following subject areas: Mental Math, Data Management, Housing, Banking, Measurement, and Taking a Trip.

**Pre-Calculus Mathematics 12** (advanced, 1 credit)

*Prerequisite: Successful completion of Pre-calculus 11. Pre-calculus 11 must be taken and successfully completed prior to starting Pre-calculus 12. Therefore, these courses are to be taken consecutively, not concurrently, and the order may not be reversed.*

*The Pre-calculus pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that require the study of theoretical calculus.*

*Students who select Pre-calculus 12 should have a solid understanding of the Pre-calculus 11 curriculum.*

*Students in Pre-calculus 12 will study the following topics:*

- *transformations*
- *radical functions*
- *polynomial functions*
- *trigonometry*
- *exponential and logarithmic functions*
- *rational functions*
- *function operations*
- *permutations, combinations and the binomial theorem*

**Calculus 12** (Advanced, 1 credit)

*Pre-requisite: Pre-calculus Mathematics 12.*

*This optional course is generally not an actual requirement for entry into programs that will include calculus in their own set of classes, but it will provide valuable advance knowledge and practice for what is for many a challenging course in university.*

**Mathematics 12** (academic, 1 credit)

*Prerequisite: Successful completion of Mathematics 11 or Pre-calculus 11. The prerequisite for Mathematics 12 must be taken and successfully completed prior to starting Mathematics 12. Therefore, these courses are to be taken consecutively, not concurrently, and the order may not be reversed.*

*The Mathematics pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus. Mathematics 12 is the third course in this pathway.*

*Students who select Mathematics 12 should have a solid understanding of the Mathematics 11 curriculum.*

*Students in Mathematics 12 will study the following topics:*

- *borrowing money*
- *investing money*
- *set theory*
- *logical reasoning*

**Mathematics at Work 12** (graduation, 1 credit)

*Prerequisite: Successful completion of Mathematics at Work 11 or Mathematics 11. The prerequisite for Mathematics at Work 12 must be taken and successfully completed prior to starting Mathematics at Work 12. Therefore, these courses are to be taken consecutively, not concurrently, and the order may not be reversed.*

*The Mathematics at Work pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for direct entry into the work force or for entry into programs of study that do not require academic mathematics. Mathematics at Work 12 is the third course in this pathway.*

*Students in Mathematics at Work 12 will study the following topics:*

- *measurement and probability*
- *measures of central tendency*
- *scatterplots*
- *linear relationships*
- *owning and operating a vehicle*
- *properties of polygons*
- *transformations*
- *trigonometry*

# Science Courses

**Students must obtain at least two credits in science in order to graduate. Normally one of these will be Science 10, which all students in MRHS take in the Grade 10 year. The other credit may be any other science credit. Please note that additional science credits may be used to meet the 2-credit Technology/Math/Science requirement.**

## **Science 10** (academic, 1 credit)

The senior high science program builds on this foundational science course. It is strongly recommended that **all** students take Science 10 as a prerequisite to more specialized study in any sciences in grades 11 and 12. This course comprises four units of study: Sustainability of Ecosystems, Chemical Reactions, Weather Dynamics, and Motion.

## **Agriculture/Agrifood 11** (academic, 1 credit)

Students are required to the compulsory module, Fundamentals and a total of three of the following models: Primary Productions Systems, Support Systems, Beyond the Farm Gate, Foods and Project.

## **Biology 11** (academic, 1 credit)

*Recommended Prerequisite: Science 10*

This course emphasizes the science themes of change, diversity, energy, equilibrium, matter and systems. In addition to developing students' understanding of fundamental science concepts and principles, it also refines their understanding of the nature of science and technology. The course comprises four units of study: Matter and Energy for Life, Biodiversity, Maintaining Dynamic Equilibrium, and Interactions among Living Things.

## **Chemistry 11** (academic, 1 credit)

*Pre-requisites: Science 10 and Mathematics 10*

This course builds on the fundamental attitudes, skills and knowledge acquired in Science 10. The three units of study are Stoichiometry (the mole to mole relationship in a balanced chemical equation), From Structures to Properties (the different forces of attraction involved in matter and how it influences their properties), and Organic chemistry (the study of molecular compounds of carbon).

## **Human Biology 11** (open, 1 credit)

This course offers the opportunity to study the biology of the human body and its interaction with its environment. It is recognized as an alternate second science credit for those students who will not choose to study science at the post-secondary level. Students cannot count credits obtained in both Human Biology 11 and Biology 11. Please note that students intending to take Biology 12 and subsequently go on to Nursing or Science programs or similar should take Biology 11 instead of Human Biology 11.

## **Oceans 11** (academic, 1 credit)

This course offers students the opportunity to explore aspects of global and local oceanography and current ocean-related issues. The compulsory modules are: Structure and Motion, Marine Biome, and Coastal Zones.

## **Physics 11** (academic, 1 credit)

*Pre-requisites: Science 10 and Mathematics 10*

Physics is the branch of knowledge that studies the processes and structures of the natural world at the most fundamental level. Objects as small as atoms and as large as galaxies are investigated in an attempt to understand the underlying principles and structures. Physics 11 consists of four units of study: Kinematics (how forces, velocity and acceleration can be measured and represented as vectors), Dynamics (the relationship between force, mass and acceleration), Energy and Momentum (how momentum relates to and object's motion), and Waves (common characteristics of mechanical, sound and light waves).

**Biology 12** (academic, 1 credit)

*Suggested Prerequisites: Biology 11. Note that Human Biology 11 is not recommended as a biology course taken prior to Biology 12. It is also highly recommended that students have completed Chemistry 11 prior to taking Biology 12.*

Building on what was learned in Biology 11, this course continues to refine students' awareness of the impact of biology and associated technology on society and the limitations of the biological sciences, sciences in general and technology in solving societal problems. The four units of study are: Maintaining Dynamic Equilibrium, Reproduction and Development, Genetic Continuity, and Evolution, Change and Diversity.

**Chemistry 12** (academic, 1 credit)

*Pre-requisite: Chemistry 11. Mathematics 11 recommended.*

This course provides a more in-depth exploration of various topics intended for students pursuing post-secondary chemistry, using learning opportunities to connect Chemistry to technology, society and the environment. The four units of study are Thermochemistry (energy changes that occur with physical and chemical processes), From Solutions to Kinetics to Equilibrium (factors that affect the rate of chemical reactions), Acids and Bases, and Electrochemistry (electric forces, matter and energy in chemical changes, and quantitative relationships in changes).

**Physics 12** (academic, 1 credit)

*Pre-requisites: Mathematics 11 and Physics 11*

The four units of study in this course are: Force, Motion, Work and Energy, Fields, Waves and Modern Physics, and Radioactivity.

## **Social Studies Courses**

**Canadian History requirement. Students must complete one of the two following courses in order to obtain the Canadian history credit required for graduation.**

**Mi'kmaw Studies 11** (academic, 1 credit)

Mi'kmaw Studies 11 is a course that serves not only to highlight the Mi'kmaw experience, but also to provide opportunities for learners to gain an understanding how they are connected to the history and culture of the First Peoples of the Maritimes. The course incorporates an inquiry-based approach and examines broad concepts such as governance, culture, justice, spirituality, and education. Students will analyse historical and contemporary Mi'kmaw issues, which enables them to achieve a greater understanding of, and respect for, both Mi'kmaw society and Mi'kmaw contributions to Canadian society.

**Canadian History 11** (academic, 1 credit)

This course is organized around five continuing or persistent questions that have deep historical roots that previous generations of Canadians have had to address. Their efforts have shaped the development of Canada and its identity. The units of study in this course are Globalization, Development, Sovereignty, Governance, Justice and an Independent Study. **(This course is also offered in French within the Integrated French program as one of the six credits required.)**

**African Canadian Studies 11** (academic, 1 credit)

This course highlights the experiences, struggles, and life stories of people of African descent who have contributed to world history. Course fills the compulsory Canadian History graduation requirement. Areas of study will be: 1) Ancient Kingdoms of Africa 2) Slavery: The Transcontinental Movement: 3) Major Immigration and Emigration Patterns of Black Settlers to and from Canada 4) The Pursuit of Economical and Political Empowerment 5) Modern Day Culture and Issues in North America and Africa.

**Global Studies requirement.** Students must complete one of the two following courses in order to obtain the necessary global studies credit required for graduation. Alternatively there may in some years be other eligible courses available on-line.

**Global Geography 12** (academic, 1 credit)

This course, which focuses on global geography, explores major themes that help us to understand the nature and origins of complex humanity/environment relationships in the contemporary world. **(This course is also offered in French within the Integrated French program as one of the six credits required.)**

**Global History 12** (academic, 1 credit)

Global History examines the history of the post World War II era. It features five units: The Global Historian, The Dynamics of Geo-Political Power, The Challenge of Economic Disparity, The Pursuit of Justice and Societal Change. Topics may include the Cold War, political ideology, wealth and poverty, human rights, International Humanitarian Law, and global interdependence.

**OTHER SOCIAL STUDIES COURSES.** The following courses are available for elective credit.

**Law 12** (academic, 1 credit)

This course is classified as both a social studies and a business education course. It is designed to provide students with knowledge of law and its function in society and the skills and attitudes that will enable students to understand the legal process. Course content includes the Canadian legal system, crimes and crime control, injuries and wrongs, human rights, property rights, promises and agreements, business and relations, family relations, and courts and trials.

**Sociology 12** (academic, 1 credit)

This course allows students to examine Canadian sociological issues, such as the family, students and schools, poverty, minority groups, women in society, labour and management, conflict, crime in Canada, punishment and rehabilitation, and the future. It also allows students to participate in a local community/sociological project.

## **Fine Arts Courses**

**Students MUST complete at least one of these courses** in order to graduate from high school. Students transferring from other schools might have taken other eligible courses. It may be possible to undertake Advanced level credits with additional outcome requirements in some cases.

**Visual Arts 10** (academic, 1 credit)

Students focus primarily on developing a variety of core skills and techniques for creating personal images. The work will cover a wide variety of art styles, approaches and media. Students will be introduced to problem solving, creative decision-making, visual concepts and symbols.

**Visual Arts 11** (academic, 1 credit)

Students expand on theories learned in Art 10 to develop a more independent and personal approach to art making. Projects will build on conceptual and visual skills while studying contemporary artists, art themes and methods.

**Visual Arts 12** (academic, 1 credit)

Students will have the opportunity to do independent projects, which introduce them to studio work. They will attempt to use alternative materials and to do more independent research. Art history, analysis and interpretation will underly much of the work completed.

**Drama 10** (academic, 1 credit)

This is an introductory course in drama focusing on the personal, intellectual and social growth of the student. The four components of the course are Foundation, Movement, Speech and Theatre.

**Drama 11** (academic, 1 credit)

This course focuses on the personal growth of the student. Through extensive work in improvisation, both in small and large groups, students gain confidence as they explore and communicate ideas, experiences and feelings in a range of dramatic forms such as dramatic movement and mime, dramatization, choral speech, choral drama, group drama and readers theatre

*Please note that **Music courses** span the complete year and are taken in conjunction with a dedicated section of all-year English, with classes taking place on alternating days. Music students must also be a member of the concert band and take part in events outside of regular school hours. Concert band is optional*

**Music 10** (academic, 1 credit)

Band Students who continue in the band program in grade 10 are able to earn a credit in Music 10. It is a continuation of improving individual instrumental proficiency, through advanced technique of scales and studies, and individual performance of solo repertoire.

**Music 11** (academic, 1 credit)

A continuation of improving individual instrumental proficiency, through advanced technique of scales and studies, and individual performance of solo repertoire.

**Music 12** (academic, 1 credit)

A continuation of improving individual instrumental proficiency, through advanced technique of scales and studies, and individual performance of solo repertoire.

# **Technology Education Courses**

**Students MUST complete at least two credits in technology OR two credits in mathematics and/or science beyond the basic requirements in those subject areas, OR a combination of one technology course and an extra science or mathematics credit. Please note that this means that a student can in fact graduate without taking any technology courses, if he or she takes two science and/or mathematics courses beyond the minimum requirements.**

## **Exploring Technology 10** (open, 1 credit)

This technology course provides students with hands-on activities and introduces them to a broad spectrum of technological concepts. Students will have opportunities to use a range of technical applications, integrate technological with other academic disciplines, create devices and systems to satisfy their needs, explain how technology affects society, and use technology in problem-solving situations.

## **Construction Technology 10** (open, 1 credit)

The construction technology course helps develop in students an understanding of construction technology, of its applications related to the basic human need for shelter, of the organization of construction, and of construction's impacts on society. The course offers technology – learning activities involving bridge building, stick frame construction and problem solving. Materials are also provided about leading architects and designers in Canadian construction as well as ideas for correlating the course with other subject areas.

## **Communications Technology 11** (open, 1 credit)

This course will enable students to demonstrate in a variety of ways knowledge and application of different modes of communication, including audio, visual, graphic, electronic and computer communications.

## **Energy, Power and Transportation 11** (open, 1 credit)

Students will learn to demonstrate, in a variety of ways, an understanding of different forms of energy, the ways energy is harnessed, and the application of energy to modern day transportation systems.

## **Production Technology 11** (open, 1 credit)

By the end of this course, students are able to demonstrate the process required to create a product using a variety of materials and methods. Entrepreneurship is an integral part of the grade 12 course.

## **Film and Video Production 12** (academic, 1 credit)

This course involves students in the production of a film or video. Students work independently and as a part of a production team to explore roles in the film industry, develop a critical awareness of historical and cultural aspects of film, and work through the process of producing a film or video from script development to final edit.

## **Computer Programming 12** (academic, 1 credit)

This course is designed to teach students how to write these lines of instruction. Students will write computer applications that can solve real-life problems. The topics we will study include: design specifications, algorithms, coding, testing and debugging. These are the major steps of software design known as the software design life cycle. With it, you will plan, create and test applications from an idea to a final product. Students should have very strong math and logic skills to undertake this adventure. Recommended Prerequisite: Mathematics 11 or Advanced Mathematics

## **Multimedia 12** (academic, 1 credit)

Students will complete four modules: Creating and Manipulating Images, Creating and Manipulating Sequence Images, Sound and Collaborative Project and Personal Portfolio.

## **Physical Education Courses**

**Students MUST complete at least one of these courses** in order to graduate from high school. Students transferring from other schools might have taken other eligible courses.

### **Physically Active Living 11** (open, 1 credit)

This course is designed to engage in a wide range of physically active experiences, with the overall theme of exploring options and opportunities for being physically active for life, both at school and in the community. The activity component of the course is designed to provide opportunities for students in active experiences that engage youth in traditional and non-traditional forms of physical activity. The theory component will enhance student understanding of healthy eating, injury prevention, mental and emotional health, and addiction prevention, highlighting the connection between healthy living and being physically active. **THIS COURSE IS NORMALLY TAKEN IN THE GRADE 10 YEAR IF THE INDIVIDUAL STUDENT'S PROGRAM CHOICE PERMITS.** All Integrated French students will take the French equivalent of this course (mode de vie actif 11).

### **Physical Education 11** (open, 1 credit)

This full credit course was designed to focus on sport experiences through a teaching games for understanding model which is a means to provide students with more enjoyment as they get to play modified games (in this course, sports-related games) in conjunction with learning the skills and tactics. Throughout this course, modified sports games will be taught within four categories (invasion/territory, target, net/wall, and striking/field). The emphasis throughout this course is on the tactical and strategic game play (the first module) whereby students make appropriate decisions in modified sports setting. This course also includes an additional two modules, interwoven within the first module which focus on fostering life skills through sport, and looking critically at the nature of sport and society, including injustices that often coincide within the context of sport.

### **Physical Education 12** (open, 1 credit)

This course concentrates on fitness opportunities, outdoor pursuits, and individual, dual and games. Many opportunities are offered to learn and practice leadership.

## **Business Education Courses**

### **Entrepreneurship 12** (academic, 1 credit)

This course is designed to help students acquire the knowledge, skills, attitudes, and values they will require, in innovative ways, to meet many of the opportunities and challenges of citizenship as employees, or as independent business people. Entrepreneurship is divided into three sections: a theory component, an action component, and a business planning component, all of which run concurrently.

### **Law 12** (academic, 1 credit)

This course is classified as both a social studies and a business education course. It is designed to provide students with knowledge of law and its function in society and the skills and attitudes that will enable students to understand the legal process. Course content includes the Canadian legal system, crimes and crime control, injuries and wrongs, human rights, property rights, promises and agreements, business and relations, family relations, and courts and trials.

## **Family Studies Courses**

### **Child Studies 11** (open, 1 credit)

This course explores the many roles and responsibilities involved in caring for young children, and provides students with practical information on nurturing and interacting with children, and develops in students an appreciation of the importance of nutrition, play, music and language in child development.

### **Canadian Families 12** (open, 1 credit)

Canadian Families 12 is designed to develop an understanding of the nature of families in historical, social, and cultural contexts; to promote awareness of the role played by economics, work, and shelter in maintaining successful families; and to examine the physical, social, and emotional dimensions of family health in adopting a preventive approach to family well-being. This course is developed around three modules:

- Images of Families (historical perspective, families today, family law, families of the future)
- Family Development (relationships, family arrangements, parenting, families in later life, death as a process)
- Family Well-Being (family health, family economics, family and work, family shelter)

## **Personal Development and Career**

**Leadership 12** (Academic 1 credit) Leadership 12 is a personal development course designed to provide students with experiences to create a personal philosophy of leadership that is based on their core beliefs and values in relation to socially responsible leadership. They will understand the concept of socially responsible leadership and how it impacts economics, social, environmental and ethical issues. Students of Leadership 12 are inclined to be supportive of their school and community, and are considering a future involving leadership. Leadership 12 will include opportunities that enable students to clarify and strengthen their values in relation to social responsibility, and to work at aligning leadership behaviour with these values. Students will be required to reflect on how their actions as leaders affect school culture and promote human rights. Students will complete a volunteerism component within their school or community.

## **Cooperative Education**

**Cooperative Education may be taken in both the Grade 11 and Grade 12 years with appropriate credit given. In some circumstances students might take cooperative education in both semesters, with multiple credits offered. See the cooperative education teacher or the guidance counsellor for details. Note that there is a separate cooperative education class within the O2 program.**

Students who wish to take cooperative education should indicate that choice on the course selection sheet but actual **entry will require the completion of a special form, followed by an interview** with the cooperative education teacher, who will evaluate the suitability for the program of the student and his or her career plans.

### **Cooperative Education 11 or 12** (open, 1 credit)

Cooperative Education is a credit program that allows students to explore a possible career, gain valuable work experience and learn employment skills. The course consists of an in-school and out-of-school component. While in class, students study employment skills, job search strategies and career planning. The out-of-school component takes place in the community where the student is placed with an employer in an area related to their career interest and to at least one of their regular courses. These courses are normally offered at the open category level in this school but in unusual circumstances an academic credit might be possible.

## **Learning Strategies**

### **Learning Strategies 10** (open, 1 credit)

Learning Strategies 10 is an open course designed to assist students enhance and develop their learning skills and strategies. Learning Strategies 10 will assist students with the transition into the high school credit system and students will better understand themselves as a learner. Topics to be covered in this course include self-awareness, time management, organization, communication skills and test and examination preparation. Strategies will be explicitly taught and will then be re-enforced by integrating the curriculum from the student's other subject areas. Students will be encouraged to use appropriate technology to support their learning.

### **Learning Strategies 11 and Learning Strategies 12** (open, 1 credit each)

These are open credit course that continue to build on the learning outcomes attained through Learning Strategies 10. These courses are for students who have successfully completed Learning Strategies 10 and who have been identified through the program planning process. An examination of post secondary goals is a major component of this course and the lessons will build on the skills identified in Learning Strategies 10 as those necessary for the successful transition to work or studies beyond high school.

## **O<sub>2</sub> “Options and Opportunities”**

**Entry into O2 requires the completion of a special application form and an extensive interview process. Students normally enter O2 only when they are entering Grade 10.** While it does provide wonderful opportunities to the students who take part, there are credit requirements above and beyond the 13 specified credits for graduation. O2 is open to students of all academic levels but some who wish to also pursue such programs as Music, Integrated French, or a full set of mathematics and science courses may encounter difficulties in fitting them all into a three year timetable.

This program provides a comprehensive educational opportunity that bridges high school to post secondary education, work and/or youth apprenticeships for students. The program is about helping students make connections between what they are learning in school and post-secondary programs and/or work.

High school students who participate in this three year program get experience in a career academy and increased opportunities for community-based learning such as cooperative education credits. Students who graduate from O2 will have fulfilled all graduation requirements and earned a high school diploma. In addition, they will have also graduated with a greater understanding of their skills, knowledge and strengths, and a career plan. There is a link between the program and the Nova Scotia Community College. The O2 program assists students with meeting milestones for admittance into programs as the NSCC.

The goals of Options and Opportunities are for students to stay in school and graduate, have a career plan, transition to community college, university, youth apprenticeship and/or work, complete their post secondary education, and find satisfying work within Nova Scotia. The components of the program are community learning partnerships, integrated career education and planning, skills for the workplace, and instructional teaming.

O2 is a full high school program (10-12) and is available to students entering grade 10 who need additional help with career and educational planning. Students must apply and participate, along with their families, in an admissions process.

**Students entering O2 (in Grade 10) will take the following two courses.**

### **Career Development 10** (open, 1 credit)

This course focuses on developing students' abilities to communicate, think, and deal with their feelings. They will explore realistic personal goals, assess their own abilities, and realize how these actions will affect their learning and decision-making processes. They will develop awareness of their place in the community and the value to their personal growth of giving service to the community. The course is divided into five modules: personal development, career awareness, workplace readiness, financial management and Life/Work Portfolio. The LifeWork Portfolio is the tool provided to students so that they may start or continue to organize the artifacts of their significant achievements and life events and reflect on their meaning.

### **Community Based Learning 10** (open, 1 credit)

Community-based learning is a partnership involving the student, families, the school and the community, with each of the partners sharing the responsibility for the student's learning experience. Students benefit from the expertise, talent, and resources of community-based service organizations, agencies, business, industry, citizen groups, entrepreneurs, and parents and gain opportunities to apply and enhance, in real-life contexts, knowledge, skills, and attitudes acquired through their work in school.

**Students continuing on in O2 into Grade 11 will take additional O2 courses, and will pick them on the course selection sheet.**

**Grade 11 O2 students will take the pair of CD11 and WHS11 in the first semester, and O2 Co-operative Education 11 in both the first and second semesters.**

### **Career Development 11** (open, ½ credit)

This course offers students a chance to further their knowledge about community development

and active citizenship. The course is shaped to provide students with a progressively independent approach to community activities, and they are encouraged to start and complete community projects with very little assistance from teachers. It is a half-credit course paired with WHS 11.

**Workplace Health & Safety 11 (open, ½ credit)**

This course is a half-credit course paired with CD 11, and students are presented with information relating to Workplace well-being, ethics, safety, Occupational Health and Safety Act, and Case studies with presentations from labour professionals.

**O2 Co-operative Education 11 (open, 1 credit) (Taken twice in Grade 11 for two credits)**

O2 students must take co-operative education three times within the Grade 11 and 12 years. In MRHS you will take co-op twice in Grade 11 and once in Grade 12.

## **N.S. VIRTUAL SCHOOL COURSES ("On-Line Courses")**

Students who are attending high school may access available online courses through the Nova Scotia Virtual School. These courses are presented by teachers located throughout the province and are accessed almost entirely on the internet.

Those who opt to take such courses will be doing so in order to access courses that are not otherwise available in the school or in cases where there is a scheduling difficulty that prevents a course taught within the school to be accessed.

In MRHS these courses are normally open only to Grade 11 and 12 students. Grade 10 students who have an unusual circumstance or need for an available course should discuss this with the guidance counsellor.

Online courses are scheduled just as conventional courses in a particular block in the timetable, and students are required to attend and be on time just as in regular courses. The course will be accessed via a school-provided computer in an area supervised by a designated teacher. The number of online students in the particular location will vary. Students enrolled in online courses may also work on these courses from home but doing so does not relieve students from attending at the designated time. Each

### ***On-line Course Offerings for 2017-18 (Tentative Schedule)***

**Semester 1**

*Science 10, Visual Art 10, Advanced Biology 11, Advanced Chemistry 11, Advanced English 11, Advanced English 12, African Canadian Studies 11, Biology 11, Chemistry 11, Fitness Leadership 11, Mathematics 11, Oceans 11, PreCalculus 11/12, Tourism 11, Workplace Health and Safety 11 (½ credit), Advanced English 12, Advanced Global Geography 12, Advanced Physics 11/12, Entrepreneurship 12, Film and Video Production 12, Geology 12, Global Geography 12, Global Politics 12, Law 12, Physics 11, Sociology 12, Calculus 12, Math 12,*

**Semester 2**

*Accounting 12, Advanced Visual Art 11, Advanced Physics 11, Arts Entrepreneurship 11, Business Technology 11, Calculus 12, Canadian Families 12, Canadian History 11, Mathematics 11, Chemistry 12, Physics 11, PreCalculus 11/12, Tourism 11, Visual Art 11, Accounting 12, Advanced Calculus 12, Chemistry 12, Computer Programming 12, Entrepreneurship 12, Film and Video Production 12, Global Geography 12, Global Politics 12, Mathematics 12, Multimedia 12, Oceans 11, Sociology 12*

## **OTHER CREDIT OPTIONS**

### **CHALLENGE FOR CREDIT**

Challenge for Credit opportunities exist in certain courses (Fine Arts, Languages, Mathematics, and Physical Education). There is no Challenge for Credit for Language Arts programs (this includes Français 10, 11 & 12).

Challenge for Credit provides a process for students to demonstrate that they have already acquired the skills, knowledge, and attitudes outside of the classroom setting that an existing course seeks to develop.

Check with your Guidance Counsellor for further information on this process.

### **INDEPENDENT STUDY**

An Independent Study Course expands the curriculum of a Public School Program course a student is taking or has already taken. Opportunities exist for students to be granted one Independent Study Credit in Grade 11 and one in Grade 12. See your Guidance Counsellor for further information.

### **CORRESPONDENCE COURSES**

Correspondence courses are unlike on-line courses in three ways. First, they are more traditional in nature in that they are generally carried out on paper with assignments sent through the mail to a designated marker. Secondly they are not provided free of charge; however the school will lend the appropriate textbook if available. Thirdly they are not fitted into the school timetable, and are done on free time or, more likely, at home. For information on correspondence courses, please consult your guidance counsellor. These courses are more often taken by students who are not enrolled in a high school but may be suitable in some circumstances for in-school students.

## **PERSONAL DEVELOPMENT CREDITS**

Beginning in September 2012, all high school students in Nova Scotia will be able to earn personal development credits and have this count as one of the five elective credits they need to graduate. Students can earn personal development credits in three areas: arts, languages and leadership. Personal development credits will be awarded for approved courses, programs or programs of a high school standard that contribute to the Atlantic Essential Graduation Learnings and meet standards defined in the policy directives and guidelines. The Personal Development Credit Policy will acknowledge the value of student learning outside the public school system by recognizing for high school credit, achievements and credentials earned in the community.

Check with your Guidance Counsellor for further information on this process. Of particular interest in the MRHS area are credits associated with 4-H and with the cadet movement.

## **THE LEARNING AND RESOURCE CENTRES**

These Centres provide services for students who have been identified as requiring additional planning and support to meet their unique needs.

The Resource Centre and Resource Teacher: Teaching strategies, classroom organization, curricular content and assessment and evaluation techniques will be adapted to assist these learners in meeting provincial outcomes. These adaptations are the joint responsibility of the classroom teacher and the resource teacher. Students with adaptations who meet the standard outcomes of a course will receive credit on the transcript identical to that received by other students enrolled in that course.

When students with adaptations are not able to meet provincial outcomes, an **Individual Program Plan** (IPP) will be developed. Parents/guardians will be involved in decisions regarding program adaptations and IPP's. Students on IPP's are integrated into the regular classroom setting as much as possible. Specific course titles may vary from those of the students in the same room. For example a student on an IPP in science and sitting in a Science 10 class might be enrolled in Science 10 IPP or alternatively in Applied Science 10 IPP, depending on the level of need. Some students with particular needs may come under the guidance of the Learning Centre teacher and spend time in the Centre in order to best support and address specific needs.

**FOR CLARIFICATION OR FOR MORE INFORMATION  
REGARDING THE COURSE SELECTION PROCESS,  
THE CREDIT SYSTEM, OR THE REQUIREMENTS FOR  
POST-SECONDARY PROGRAMS PLEASE FEEL FREE  
TO CONTACT THE GUIDANCE COUNSELLOR**

