**Harbour View High School**

**Grade 10 Registration Form**

**2022 – 2023**

Student: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (Last Name) (First Name) (Middle Initial)

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parents Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Homeroom Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Students must select five courses for each semester. Please read directions at the beginning of each section carefully. Check your selected courses in the column provided. French Immersion (FI) students must select courses shaded in grey.**

**REACH BACK FOR GRADE 9**

If you have not successfully completed any of the following COMPULSORY courses in grade 9, please select as necessary

|  |
| --- |
| 🗸 |
|  | English 9 Info Text |
|  | Math 9 A |
|  | FI Math 9 A |
|  | Math 9 B |
|  | FI Math 9 B |
|  | Science 9 |
|  | FI Science 9 |
|  | Social Studies 9 |
|  | FI Science 10 |
|  | Science 10  |

**ENGLISH**

Student must take a full year of grade 10 English. Students considering Advanced Placement English and who have a minimum of 80% in grade nine English should check the box to indicate a desire to pursue Enriched English.

**English 9 - \_\_\_\_\_\_\_\_\_%**

|  |  |
| --- | --- |
|  | English 10 (Lit Text & Info Text) |
|  | Enriched English (Prerequisite: 80% in English 9) |

**MATHEMATICS**

Students on the AP (Advanced Placement) track with a mark of 80% or higher in Math 9 should select AP Track below and choose Foundation 110 and NRF in the “credit courses” section. All other students must take GMF 10 and 1 other math credit listed under the credit course section.

**Math 9 - \_\_\_\_\_\_\_\_%**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  [AP Track - FI GMF/NRF (Prerequisite: 80% in Math 9)](#nrf" \o " Numbers, Functions & Relation (Also FI)This course is the first course on the academic pathway and is the prerequisite for Foundations 110.  This course gives students the basic principles in prime and polynomial factoring, radicals and rational exponents, exponent laws, including negative exponents, linear relations and systems of linear equations and the examination of relations and functions, including their similarities and differences along with function notation.) | 1 credit | video |
|  |  [AP Track – GMF/NRF (Prerequisite: 80% in Math 9)](#nrf" \o " Numbers, Functions & Relation (Also FI)This course is the first course on the academic pathway and is the prerequisite for Foundations 110.  This course gives students the basic principles in prime and polynomial factoring, radicals and rational exponents, exponent laws, including negative exponents, linear relations and systems of linear equations and the examination of relations and functions, including their similarities and differences along with function notation.) | 1 credit | video |
|  |  [FI GMF 10](#gmf" \o "Math : Geometry, Measurement and Finance 10Topics: Pythagorean Theorem, polygons, angles, trigonometric ratios, metric and imperial systems of measurement, surface area and volume, unit pricing, currency exchange, income( gross pay and net pay) , credit cards, loans, interest) (Geometry, Measurement, & Finance)  |  |  |
|  | [GMF 10](#gmf" \o "Math : Geometry, Measurement and Finance 10Topics: Pythagorean Theorem, polygons, angles, trigonometric ratios, metric and imperial systems of measurement, surface area and volume, unit pricing, currency exchange, income( gross pay and net pay) , credit cards, loans, interest) (Geometry, Measurement, & Finance) |  |  |

**SOCIAL STUDIES 10**

All students are required to take Social Studies 10.

|  |  |
| --- | --- |
|  | Social Studies 10 |
|  | FI Social Studies 10 |

**FRENCH**

All students except those who are officially exempt from French must complete French 10. Students exempted from French should choose a third specialty course. Please indicate if you’re an early or late immersion student.

|  |  |
| --- | --- |
|  | Post Intensive French 10 |
|  | FI (**Early**) Language Arts 10 |
|  | FI (**Late**) Language Arts 10 |

**SPECIALTIES**

Students choose up to two other specialties. Specialties in grade ten are considered prerequisites for credit courses in some subject areas. Do NOT choose more than 1 specialty in the same subject. Rank in order of preference. Choose three; 1 indicating your first choice, 2 indicating your second choice, and 3 as your alternate.

|  |  |  |
| --- | --- | --- |
|  |  [BB Tech 10](#BBT" \o " Broad Base Technology 10 This course is designed to serve as an introduction to the various technology courses offered at Harbour View High School.  Each unit of study in BBT 10 will give students the opportunity to explore the nature of the technology and make an informed decision about whether this is an area they wish to pursue when selecting grade 11 and 12 credits.) |  |
|   |  [Health & Physical Education 10](file:///C%3A/Users/ashley.vautour/Downloads/fitness#PE10) |  |
|  |  [HPE 10 – Basketball Academy](#bballacad" \o " Health and Physical Education 10 – Basketball Academy This course will cover the outcomes required for HPE 10 but with basketball-specific elements. Training will focus on improving individual skills such as shooting, ball handling, passing, and one on one moves.  Defensive and offensive team tactics will also be taught, but the emphasis will be on the individual skills required to perform at game speed.  Physical fitness training will also be included and will emphasize how to train in season with students following their own plans to improve flexibility, strength, aerobic and anaerobic capacity.) |  [video](https://www.youtube.com/watch?v=87rsGw3WO5s&t=58s) |
|  |  [Instrumental Music 10 (2](#instmus" \o "(Instrumental) Music Grade 10 (2nd year) This performance-based course extends the Grade 9 Instrumental music program. Students will continue ensemble playing through a broad repertoire and study basic music theory. Prerequisite: (Instrumental) Music 9)[nd](#instmus" \o "(Instrumental) Music Grade 10 (2nd year) This performance-based course extends the Grade 9 Instrumental music program. Students will continue ensemble playing through a broad repertoire and study basic music theory. Prerequisite: (Instrumental) Music 9) [year – Prereq:](#instmus" \o "(Instrumental) Music Grade 10 (2nd year) This performance-based course extends the Grade 9 Instrumental music program. Students will continue ensemble playing through a broad repertoire and study basic music theory. Prerequisite: (Instrumental) Music 9) **[Inst. Music 9)](#instmus" \o "(Instrumental) Music Grade 10 (2nd year) This performance-based course extends the Grade 9 Instrumental music program. Students will continue ensemble playing through a broad repertoire and study basic music theory. Prerequisite: (Instrumental) Music 9)**  |  [video](https://www.youtube.com/watch?v=87rsGw3WO5s) |
|  | Music 10 (General)  |  |
|  |  [Visual Arts 10](#VA10" \o " Visual Arts 10 This course builds on the skills previously learned in grade 9 Visual Arts. Students will develop skills in shading, colour theory, pattern and design. Students will also create a sculpture using ground paper. The sketchbook is an integral part of this course. )  |  |
|  |  [AP Computer Science Principles](#apcompsci) 120 | 1 credit |  |

**CREDIT COURSES**

Students are required to select **four** of the following credit courses. Please select the four courses; 1 indicating first choice, 2 indicating second choice, 3 indicating 3rd choice and 4 to indicate the course to serve as an alternate.

**Science 10 - \_\_\_\_\_\_%**

|  |  |  |  |
| --- | --- | --- | --- |
|  | [AP Seminar / World Issues (Prerequisite: 85% in English)](#APSemWI" \o " AP Seminar / World Issues 120AP Seminar/World Issues is a year-long 2 credit courses where students learn to conduct independent research involving advanced texts and media, synthesize information from multiple perspectives, and argue their point of view through written essays and team-based oral presentations. In the process, students engage with complex ideas and events shaping the world today. They learn about the unity and diversity of human experience; the interdependent systems that link humans to each other and the natural world, and the geopolitical tensions arising from competing rights and responsibilities on the local, national, and world stages. Ultimately, the course aims to empower students with the ability to evaluate information with accuracy and communicate evidence-based arguments. Prerequisite: English 9 – 85% or Teacher’s recommendation. ) | 2 credit | [video](https://www.youtube.com/watch?v=8otNz8ZxGcg&t=120s) |
|  |  [Biology 111 (Prerequisite: 75% in Science 10)](#bio11" \o " Biology 11 (also FI) This course is geared for students who would like to pursue their interest in biology.  In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment.  There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Science 10)  | 1 credit |  |
|  |  [Biology 121 (Prerequisite: Biology 111)](#bio12" \o " Biology 12    In Biology 12, students begin to focus on Biology at a molecular level. Students will study how organisms grow and pass along characteristics to future generations, and then how these impacts at the species and population level. They also pick up from grade 11 with the study of more systems that allow multicellular organisms to maintain equilibrium internally and with their environment. In both bio 11 and bio 12 students investigate the impact of biology and technology on society and the impact of human activities on the natural world.  Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Biology 11) | 1 credit |  |
|  |  [Biology 112 (Prerequisite: Science 10)](#bio11" \o " Biology 11 (also FI) This course is geared for students who would like to pursue their interest in biology.  In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment.  There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Science 10) | 1 credit |  |
|  |  [Biology 122 (Prerequisite: Biology 111 or 112)](#bio12" \o " Biology 12    In Biology 12, students begin to focus on Biology at a molecular level. Students will study how organisms grow and pass along characteristics to future generations, and then how these impacts at the species and population level. They also pick up from grade 11 with the study of more systems that allow multicellular organisms to maintain equilibrium internally and with their environment. In both bio 11 and bio 12 students investigate the impact of biology and technology on society and the impact of human activities on the natural world.  Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Biology 11) | 1 credit |  |
|  |  [Chemistry 111 (Prerequisite:75% in Science 10)](#chem11" \o " Chemistry 11 Topics in this course include classification of matter, an introduction to atomic theories, naming elements and compounds, chemical reactions, solutions, stoichiometry and chemical bonding.  Chemistry 111 moves at an accelerated pace and involve less repetition and practice than for Chemistry 112. This should free up time, which should then be used to enrich the course with more complex and challenging problems, and extensions of topics and activities. Prerequisite:  Science 10) | 1 credit |  |
|  |  [Chemistry 112 (Prerequisite: Science 10)](#chem11" \o " Chemistry 11 Topics in this course include classification of matter, an introduction to atomic theories, naming elements and compounds, chemical reactions, solutions, stoichiometry and chemical bonding.  Chemistry 111 moves at an accelerated pace and involve less repetition and practice than for Chemistry 112. This should free up time, which should then be used to enrich the course with more complex and challenging problems, and extensions of topics and activities. Prerequisite:  Science 10) | 1 credit |  |
|  | **[FI](#bio11" \o " Biology 11 (also FI) This course is geared for students who would like to pursue their interest in biology.  In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment.  There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Science 10)** [Biology 111(Prerequisite: 75% in FI Science 10)](#bio11" \o " Biology 11 (also FI) This course is geared for students who would like to pursue their interest in biology.  In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment.  There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Science 10) | 1 credit |  |
|  | **[FI](#bio11" \o " Biology 11 (also FI) This course is geared for students who would like to pursue their interest in biology.  In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment.  There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Science 10)** [Biology 112 (Prerequisite: FI Science 10)](#bio11" \o " Biology 11 (also FI) This course is geared for students who would like to pursue their interest in biology.  In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment.  There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes.  Prerequisite:  Science 10) | 1 credit |  |
|  | **[FI](#foundation" \o " Foundations of Mathematics 110 (also FI) This course is designed for students continuing on to university programs. It is the prerequisite for Pre-Calculus 110. Students develop spatial sense and proportional reasoning through problems that involve rates, scale diagrams and relationships among similar 2-D and 3-D shapes and objects.  Students develop logical reasoning skills and apply this to proofs and problems involving angles and triangles, the sine law and the cosine law.  Students model and solve problems involving systems of linear inequality in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored and investment portfolios are analyzed. Prerequisite: Math 10 NRF (Also FI))** [Foundation of Math 110 (Prerequisite: FI NRF)](#foundation" \o " Foundations of Mathematics 110 (also FI) This course is designed for students continuing on to university programs. It is the prerequisite for Pre-Calculus 110. Students develop spatial sense and proportional reasoning through problems that involve rates, scale diagrams and relationships among similar 2-D and 3-D shapes and objects.  Students develop logical reasoning skills and apply this to proofs and problems involving angles and triangles, the sine law and the cosine law.  Students model and solve problems involving systems of linear inequality in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored and investment portfolios are analyzed. Prerequisite: Math 10 NRF (Also FI)) | 1 credit |  |
|  | **[FI](#nrf" \o " Numbers, Functions & Relation (Also FI)This course is the first course on the academic pathway and is the prerequisite for Foundations 110.  This course gives students the basic principles in prime and polynomial factoring, radicals and rational exponents, exponent laws, including negative exponents, linear relations and systems of linear equations and the examination of relations and functions, including their similarities and differences along with function notation.)** [NRF (Numbers, Relations & Functions)](#nrf" \o " Numbers, Functions & Relation (Also FI)This course is the first course on the academic pathway and is the prerequisite for Foundations 110.  This course gives students the basic principles in prime and polynomial factoring, radicals and rational exponents, exponent laws, including negative exponents, linear relations and systems of linear equations and the examination of relations and functions, including their similarities and differences along with function notation.) | 1 credit |  |
|  |  [Financial Workplace Math 110 (Prerequisite: GMF)](#financial" \o " Financial and Workplace Mathematics 110 This course is the first of two courses in the Financial and Workplace pathway designed for entry into post-secondary trades and technical programs, or for direct entry into the work force. Concepts of right triangles, trigonometry, and angles of elevation and depression are applied to contextual problems. Scale models and drawings of 2-D and 3-D objects are constructed from various views and perspectives. Students are challenged to solve problems that involve numerical reasoning. Costs and benefits of renting, leasing and buying are explored, investment portfolios analyzed, and personal budgets developed.  Students manipulate and apply formulas in a variety of ways and solve problems using proportional reasoning and unit analysis.  Students have a choice of this course or Foundations of Mathematics 11 to complete graduation requirements. Prerequisite: Math 10 GMF (Also FI)) | 1 credit |  |
|  |  [Foundation of Math 110 (Prerequisite: NRF)](#foundation" \o " Foundations of Mathematics 110 (also FI) This course is designed for students continuing on to university programs. It is the prerequisite for Pre-Calculus 110. Students develop spatial sense and proportional reasoning through problems that involve rates, scale diagrams and relationships among similar 2-D and 3-D shapes and objects.  Students develop logical reasoning skills and apply this to proofs and problems involving angles and triangles, the sine law and the cosine law.  Students model and solve problems involving systems of linear inequality in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored and investment portfolios are analyzed. Prerequisite: Math 10 NRF (Also FI)) | 1 credit |  |
|  |  [Human Physiology 110 (Prerequisite: Science 10)](#humphys" \o " Human Physiology 110 The goal of this course is to build an understanding of the physiology of the human body as a complex dynamic organism that is self-contained but impacted by and responsive to the outside world.  Throughout the course students will build their scientific literacy skills as they learn to navigate the information provided on human health and human body systems.  By the end of this course, students will have developed a holistic personal wellness plan, demonstrating their understanding of overall health, human physiology, and the effect of disease and lifestyle choices) | 1 credit | [video](https://www.youtube.com/watch?v=8otNz8ZxGcg&t=120s) |
|  |  [Introduction Applied Technology 110 (Fee $10.00)](#apptech" \o " Introduction to Applied Technology 110   (Course fee - $10.00)This course is designed to introduce students to a variety of careers in trades, providing opportunities to explore and research practices and skills required for employment in trades/technology sectors. This course utilizes small group instruction, placing an emphasis on student directed learning and is structured to reflect the reality of work. Problem identification, teamwork and leadership skills will be reinforced. Student creativity and life skill development in the design, construction, repair, and maintenance unit modules reinforce situations that are found in industry.) | 1 credit | [video](https://www.youtube.com/watch?v=t8jFisIjyf4&t=206s) |
|  |  [NRF (Numbers, Relations & Functions)](#nrf" \o " Numbers, Functions & Relation (Also FI)This course is the first course on the academic pathway and is the prerequisite for Foundations 110.  This course gives students the basic principles in prime and polynomial factoring, radicals and rational exponents, exponent laws, including negative exponents, linear relations and systems of linear equations and the examination of relations and functions, including their similarities and differences along with function notation.) | 1 credit |  |
|  | [Physical Geography 110](#pg" \o " Physical Geography 110This course has two main components: maps and physical processes. The first component introduces skills that are basic to a geographer’s use of topographic maps. The physical landscape section includes Plate Tectonics, earthquakes, volcanoes, mountain ranges, mountain building, continental drift, groundwater, and wind. This course can be used as a science credit.) | 1 credit | [video](https://www.youtube.com/watch?v=ycTD9nBYPSw&t=172s) |
|  |  [Physics 111 (Prerequisite: Science 10/GMF/NRF)](#physics" \o " Physics 11This is a course which will be valuable for students interested in medical, engineering, technician, electrical and construction careers, as well as those who are curious about the world around them. The course covers the areas of waves (light and sound), motion, forces, work and energy. There is a strong practical component drawing on experimental and problem-solving skills. Level 1 students will cover additional curriculum outcomes.Prerequisite:  Grade 10 Science and GMF 10 / NRF 10) | 1 credit | [video](https://www.youtube.com/watch?v=ycTD9nBYPSw&t=233s) |
|  |  [Physics 112 (Prerequisite: Science 10/GMF/NRF)](#physics" \o " Physics 11This is a course which will be valuable for students interested in medical, engineering, technician, electrical and construction careers, as well as those who are curious about the world around them. The course covers the areas of waves (light and sound), motion, forces, work and energy. There is a strong practical component drawing on experimental and problem-solving skills. Level 1 students will cover additional curriculum outcomes.Prerequisite:  Grade 10 Science and GMF 10 / NRF 10) | 1 credit | [video](https://www.youtube.com/watch?v=ycTD9nBYPSw&t=233s) |
|  | [Writing 110](#writing" \o " Writing 110  Writing 110 provides an opportunity for motivated students to hone their writing skills by taking part in a variety of writing activities including, but not limited to, creative non-fiction, fiction, and poetry. Students will have the opportunity to share their work with each other in a workshop setting. Students will participate in NaNoWriMo, writing the first draft of a novel.  Student work will be assessed throughout the course and culminate in a portfolio.) | 1 credit | [video](https://www.youtube.com/watch?v=vLBuQc9A2LA&t=61s) |
|  | [Young Adult Literature 120](#youngadult" \o " Young Adult Literature 120                                                                              (Contact: English SPR)Do you LOVE to read?  YAL is dedicated to bringing the joy back to reading. This course will appeal to avid readers who enjoy introspective writing and lively discussion. We will take a look at some of the most popular genres in YA literature: dystopian, realistic, supernatural, novels written in verse etc. But mostly we read for FUN! ) | 1 credit | [video](https://www.youtube.com/watch?v=91xaQkPV2Rc&t=699s) |

**VP/Guidance Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Specialty Course Descriptions**

**BB Tech 10** This course is designed to serve as an introduction to the various technology courses offered at Harbour View High School. Each unit of study in BBT 10 will give students the opportunity to explore the nature of the technology and make an informed decision about whether this is an area they wish to pursue when selecting grade 11 and 12 credits.

**HPE 10** This course provides students with the opportunity to acquire knowledge about the relationships between their own personal health and physical activity. It will introduce students to a number of recreational activities, many of which they may pursue beyond their high school years. While the course is concerned with the acquisition of knowledge and skill, an essential goal is the development of positive self-esteem and active participation in physical activities.  The course emphasizes “fitness for life.”

**HPE 10** – **Basketball Academy** This course will cover the outcomes required for HPE 10 but with basketball specific elements. Training will focus on improving individual skills such as shooting, ball handling, passing and one on one moves. Defensive and offensive team tactics will also be taught, but the emphasis will be on the individual skills required to perform at game speed. Physical fitness training will also be included and will emphasize how to train in season with students following their own plans to improve flexibility, strength, aerobic and anaerobic capacity.

**(Instrumental) Music Grade 10 (2nd year)** This performance-based course continues the Grade 9 Instrumental music program. Students will continue ensemble playing through a broad repertoire and basic music theory. **Prerequisite: (Instrumental) Music 9**

**Visual Art 10** This course builds on the skills previously learned in grade 9 Visual Arts. Students will develop skills in shading, colour theory, pattern and design. Students will also create a sculpture using ground paper**.** The sketchbook is an integral part of this course. This course is required for grades 11 and 12 Graphic and Visual Arts.

**AP Computer Science Principles**

AP Computer Science Principles is an introductory college-level computing course that introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs.

**Credit Course Descriptions**

**AP Seminar /World Issues**

AP Seminar/World Issues is a year-long 2 credit courses where students learn to conduct independent research involving advanced texts and media, synthesize information from multiple perspectives, and argue their point of view through written essays and team-based oral presentations. In the process, students engage with complex ideas and events shaping the world today. They learn about the unity and diversity of human experience; the interdependent systems that link humans to each other and the natural world, and the geopolitical tensions arising from competing rights and responsibilities on the local, national, and world stages. Ultimately, the course aims to empower students with the ability to evaluate information with accuracy and communicate evidence-based arguments.

**Prerequisite: English 9 – 85% or Teacher’s recommendation**

**Biology 11 (also FI)**

This course is geared for students who would like to pursue their interest in biology. In Biology 11, students study the cell as the basic unit of life and the diversity of organisms that make up World’s ecosystems. Students will also study some of the body systems that allow multicellular organisms to maintain equilibrium as they interact with the outside environment. There is a significant lab component to this course with several dissections. Level 1 students will cover additional curriculum outcomes**. Prerequisite: Science 10**

**Biology 12**

In Biology 12, students begin to focus on Biology at a molecular level. Students will study how organisms grow and pass along characteristics to future generations, and then how these impacts at the species and population level. They also pick up from grade 11 with the study of more systems that allow multicellular organisms to maintain equilibrium internally and with their environment. In both bio 11 and bio 12 students investigate the impact of biology and technology on society and the impact of human activities on the natural world. Level 1 students will cover additional curriculum outcomes. **Prerequisite:  Biology 11**

**Chemistry 11**

Topics in this course include classification of matter, an introduction to atomic theories, naming elements and compounds, chemical reactions, solutions, stoichiometry and chemical bonding.  Chemistry 111 moves at an accelerated pace and involve less repetition and practice than for Chemistry 112. This should free up time, which should then be used to enrich the course with more complex and challenging problems, and extensions of topics and activities. **Prerequisite:  Science 10**

**Financial Workplace Math 110**

This course is designed for entry into post-secondary trades and technical programs, or for direct entry into the work force. Concepts of right triangles, trigonometry, and angles of elevation and depression are applied to contextual problems. Scale models and drawings of 2-D and 3-D objects are constructed from various views and perspectives. Students are challenged to solve problems that involve numerical reasoning. Costs and benefits of renting, leasing and buying are explored, investment portfolios analyzed, and personal budgets developed. Students manipulate and apply formulas in a variety of ways and solve problems using proportional reasoning and unit analysis. **Prerequisite: GMF 10 (Also FI)**

**Foundations of Mathematics 110 (Also FI)**

The Foundations of Mathematics 110 course is designed for students continuing on to university programs. **Prerequisite: NRF (Also FI)**

**Human Physiology 110**

The goal of this course is to build an understanding of the physiology of the human body as a complex dynamic organism that is self-contained but impacted by and responsive to the outside world.  Throughout the course students will build their scientific literacy skills as they learn to navigate the information provided on human health and human body systems.  By the end of this course, students will have developed a holistic personal wellness plan, demonstrating their understanding of overall health, human physiology, and the effect of disease and lifestyle choices

**Introduction to Applied Technology 110** (Course Fee $10.00)

This course is designed to introduce students to a variety of careers in trades, providing opportunities to explore and research practices and skills required for employment in trades/technology sectors. This course utilizes small group instruction, placing an emphasis on *student directed learning* and is structured to reflect the reality of work. Problem identification, teamwork and leadership skills will be reinforced. Student creativity and life skill development in the design, construction, repair, and maintenance unit modules reinforce situations that are found in industry.

**Numbers, Relations & Functions (Also FI)**

This course is the first course on the academic pathway and is the prerequisite for Foundations 110. This course gives students the basic principles in prime and polynomial factoring, radicals and rational exponents, exponent laws, including negative exponents, linear relations and systems of linear equations and the examination of relations and functions, including their similarities and differences along with function notation.

**Physical Geography 110**

This course has two main components: maps and physical processes. The first component introduces skills that are basic to a geographer’s use of topographic maps. The physical landscape section includes Plate Tectonics, earthquakes, volcanoes, mountain ranges, mountain building, continental drift, groundwater, and wind. This course can be used as a science credit**.**

**Physics 11**

This is a course which will be valuable for students interested in medical, engineering, technician, electrical and construction careers, as well as those who are curious about the world around them. The course covers the areas of waves (light and sound), motion, forces, work and energy. There is a strong practical component drawing on experimental and problem-solving skills. Level 1 students will cover additional curriculum outcomes.

**Prerequisite: Grade 10 Science and GMF 10 / NRF 10**

**Writing 110**

Writing 110 provides an opportunity for motivated students to hone their writing skills by taking part in a variety of writing activities including, but not limited to, creative non-fiction, fiction, and poetry. Students will have the opportunity to share their work with each other in a workshop setting. Students will participate in NaNoWriMo, writing the first draft of a novel.  Student work will be assessed throughout the course and culminate in a portfolio.

**Young Adult Literature 120**

Do you LOVE to read? YAL is dedicated to bringing the joy back to reading. This course will appeal to avid readers who enjoy introspective writing and lively discussion. We will take a look at some of the most popular genres in YA literature: dystopian, realistic, supernatural, novels written in verse etc. But mostly we read for FUN!