2023-2024

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Province of New Brunswick - Department of Education

John Caldwell School Graduation Pathway Guidebook & Course Description Catalogue

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# Introduction and General Information

The purpose of this guide is to provide pertinent information for students as they enter high school in Grade 9 and begin to select courses in Grades 10 through 12.

A new Pathway to Graduation is beginning for students entering grade 10 in September 2023. All students expected to graduate in 2024 and 2025, will follow previously outlined graduation requirements which will be addressed in this document as well. Students expected to graduate in 2026 will follow the newly prescribed Graduation Pathway, also included below.

## General Requirements

Students who are expected to graduate until 2025 will follow requirements outlined in [Policy 316A](https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/policies-politiques/e/316AA.pdf).

* Students must complete 18 credits total for high school graduation, 2 of which must be mathematics credits and 5 credits at the Grade 12 level.
* All students must attempt 21 credits and complete four semesters.
* Students are required to take a full course load each semester. Exceptions are made for students needing an additional semester past their grade 12 year. They may take the minimum number of courses to complete graduation requirements.
* Successful completion of the English Language Proficiency Assessment
* To receive a French Immersion Certificate 5 FI courses in Grade 10, and a total combination of 5 FI courses over Grades 11 and 12 are required.

Students who are expected to graduate in 2026 and beyond will follow requirements outlined in [Policy 316B](https://www2.gnb.ca/content/gnb/en/departments/education/k12/content/policies.html).

* Students must have met learning requirements prescribed in Grade 9 curriculum
* Students must have a successful rating on the English Language Proficiency Assessment
* Students must have completed compulsory credit-hours in Grades 10 through 12
* French Immersion students must complete 50% of the Grade 9 curriculum and 40 credit-hours in Grades 10-12 French to receive this credential.
* Students must have accumulated 100 [credit-hours](#_Graduation_Requirements_–) to [apply for graduation](#_Early_Application_to). Early graduation is possible. See more information below on these two topics.
* Students must have developed a [documented career-life plan](#_myBlueprint)

Other considerations

60% is the minimum required in all courses to receive credit unless otherwise specified due to a Personalized Learning Plan or the structure of a course in which Pass/Fail may be indicated on a transcript. All grade 10, 11 and 12 credit courses and final marks are permanently recorded on a student’s transcript. The school transcript provides an ongoing record of high school courses taken and marks obtained. It is the official document required by post-secondary institutions to verify a student’s academic record.

Graduation requirements for a student with a Personalized Learning Plan (PLP) may vary. A PLP can contain one or more of the following:

* Accommodated: Accommodations are strategies, technologies, or adjustments without which a learner would not be able to access the curriculum or demonstrate their knowledge.
* Individualized: Planning that supports student’s skill development and does not follow the prescribed curriculum.
* Adjusted Curriculum: When grade level curriculum outcomes of a subject have been changed or deleted to address the specific needs of the learner. The integrity (general intent) of the course is maintained while the depth of treatment of the outcomes has been altered or deleted.

## Early Application to Graduate Process

Students who have met the graduation requirements in Policy 316 Appendix A or B have the option of applying to graduate. This provides flexibility for students, regardless of age or grade level.

Students shall be permitted to attend school sanctioned activities during their current graduation year, provided they are in good standing with the school and district.

Students who graduate before June of their graduation year, will be permitted to participate in all regular graduation activities, provided students have met all the school’s requirements, which may include graduation fees. Students are recommended to have plan that can include work, college, university, GAP, exchange, or another school, family and student agreed upon plan. The process will require both a signed letter, review of graduation status and post-secondary requirements by the school, family/guardian, and student.

The signed letter will include confirmation of:

* + Graduation status;
  + Post-secondary entrance requirement comparison to completed courses;
  + Signatures of the following:
    - School Counsellor
    - Administration
    - Parent and/or Guardian
    - Student
  + And acknowledgment of all agreed upon parties that the student has met graduation requirements and will not be attending school after the signed date.

## Course Selection

Each spring, students select courses for the following academic year. There is a wide variety of courses from which to choose, and several factors should be considered when making these choices. It is important that students, along with parents take time to carefully consider their options in consultation with teachers and advisors since it can be difficult to make changes once scheduling for the year is complete.

## Certificate of Oral Proficiency in French

The certificate of Oral Proficiency is issued to grade 12 students either in the Immersion or PIF program and indicates a student’s level of proficiency. Students must be enrolled in an FI or PIF course (of any subject matter). This certificate is awarded by the Department of Education after an assessment by professional evaluators and is presented upon completion at the end of the semester. There is no cost for this assessment.

## Enrollment Limitations

All courses are subject to limited enrollment and may be cancelled if numbers do not warrant a place in the timetable. Staffing allocation determines availability of courses. Administration reserves the right to review course numbers and offerings each semester.

## Post-Secondary Requirements

Graduation requirements and post-secondary requirements are not the same. It is up to students and families to research and ensure the institutions required courses are successfully completed for admission. What is accepted for admission at one school is not necessarily accepted at another school. Please remember school counselors are available to discuss options and pathways.

## 

## Career-Life Plans and myBlueprint

The Department of Education and Early Childhood Development has partnered with myBlueprint to provide students and their families with an engaging online education and career/life planning tool. myBlueprint Education Planner (6-12) includes many beneficial resources to support students as they progress through their education including:

✓ Assessments to learn and discover more about Learning Styles, Myers-Briggs Personality, Holland Interests, Knowledge, and Motivations

✓ Plan courses, track progress toward graduation, and instantly identify post-secondary eligibility for opportunities in all destinations

✓ Explore post-secondary options and compare information, explore occupations and real-world job postings of interest, set S.M.A.R.T. goals, build resumes, write cover letters, build a budget to develop financial literacy and document, share and reflect on learning.

**What is the myBlueprint Education Planner?**

The myBlueprint Education Planner is a student-friendly, interactive education and career/life planning resource that allows Gr. 7-12 students to reflect on their learning, showcase their growth, and share their achievements.

*Want to learn more? Watch the Student Introduction video tutorial at* [*myBlueprint.ca/support/videos*](https://www.myblueprint.ca/support/videos/education-planner/66ipAaVrY4E2AMcIy4y0oE)

**More information on how to use myBlueprint is included in the next pages.**

A picture containing text, screenshot, electronics, computer

Description automatically generated**As a parent/guardian, can I access myBlueprint Education Planner?**

Yes! You can create an account and link to your child(ren) by following the steps below.

**Why would I want access to myBlueprint Education Planner?**

The family account allows you to view student artifacts and reflections, including the goals they are setting, occupations they are interested in, and what they are learning in school.

You can log in to your account to comment on your child’s work or receive messages from their teacher(s).

*Want to watch a video tutorial about the Family Account? Visit* [*myBlueprint.ca/support/videos*](https://www.myblueprint.ca/support/videos/education-planner/66ipAaVrY4E2AMcIy4y0oE)

**Options for creating your Family Account**

**Graphical user interface, application

Description automatically generatedOption #1: Request an invitation from a student**

Have the student log in to their myBlueprint account, then:

1. Click their **Name** in the top-right corner
2. ****Select **My Links**
3. Click **Add Link**
4. Enter your name and email address.
5. Click the **Create Account** button in the email you received and follow the sign-up steps.

**Option #2: Sign up with school’s Activation Key or District Landing Page**

1. Visitwww.myBlueprint.ca/anglophonewest
2. Click **Sign Up** in the top right corner
3. Enter your child’s school **Activation Key** and click **Create Account**
4. Select **Family/Advisor,** and your child’s grade range (7-12)
5. Click **Continue** and fill out the sign-up form
6. Click **Create My Account**
7. Enter your child’s email address that they use to log in to their myBlueprint account, and click **Add Student** (*note: your child will have to approve your link request*)
8. Click **Continue**

***\*Don’t have your school activation key or District Landing page?*** *Request this information from your child’s Guidance Counsellor or Teacher.*

Try it out for yourself! Follow the steps below to complete similar tasks to what your child may be working on at school to help plan for their future.

1. Click **Student View** in the top right corner of your account.
2. Complete the five (5) **Who Am I** surveys
3. Go to **Match Results** tab > Complete two (2) **Compatibility** Surveys
4. Go to **Home** > **Goals** > **Add a goal**
5. Go to **Post-Secondary** > Select a **Pathway** (e.g., College & University) > Favourite a **program**
6. Go to **Work** > **Occupations >** Favourite two (2) **occupations**
7. Go to **Work** > **Job Search** > Look up and favourite a **job posting** in your area
8. Go to **Home** > **Portfolios** > **Add a** **Portfolio >** Name your portfolio
9. Add an **Avatar** and a **Banner** image
10. **+ Add Box** > **Add Media** > Upload a picture/image that represents who you are
    * 1. **+ Reflection** > Give an explanation of how the image represents who you are
11. **+ Add Box** > **Add from myBlueprint** > **Favourites** > An occupation that you favourited
12. **+ Add Box** > **Add from myBlueprint** > **Favourites** > A post-secondary program related to the occupation you favourited

***Document student learning on the go!*** Download the myBlueprint [Class Pass App](https://blog.myblueprint.ca/introducing-ios-class-pass-app-d9b4cb77d8f5).

**Icon

Description automatically generated***Class Pass App is an easy-to-use companion app, which allows for students to easily post artifacts, media, and evidence of learning to their portfolios. This app is compatible with both iOS and Android.*

**Helpful Hints**

Looking for some more helpful resources to support your child in the documentation of their learning? Check out these resources below:

* [Browse exemplar portfolios](https://education.myblueprint.ca/exemplar-portfolios/)
* [Video Tutorials](http://www.myBlueprint.ca/support/videos/education-planner)
* [Top 4 Reasons to Implement Digital Portfolios in the Classroom](https://assets.ctfassets.net/7wu8emvyuqje/nLAfVDeF7aeKcMeGiEOgq/fae158030d6f5e1d0fd3e3e1c0b2db10/The_Top_4_Reasons_to_Implement_Portfolios_in_the_Classroom.pdf)

**Need more support?**

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## Options for Credit

Options for Credit are opportunities to have flexibility in class schedules to explore interests and work toward educational and career goals. Options include Challenge for Credit, Personal Interest 1 & 2, Independent Study, Dual Credit Courses, and Early Start Credits. Taking into consideration what you want to learn, what topics and experiences are exciting and engaging for you can be explored with Options for Credit courses. Working with your teachers, administrators, and school counsellors will help you determine the best options for you! More details can be found [here](https://secure1.nbed.nb.ca/sites/ASD-W/LeoHayesHigh/News/Documents/FINAL%20Pamphlet_OptionsForCreditHS_Web%20(1).pdf).

## Online Courses – NBVLC

New Brunswick Virtual Learning Centre ([NBVLC](https://nbvhs.nbed.nb.ca/)) offers expanded learning opportunities to all high school students in the province by allowing registered students to access courses online, anywhere, anytime. Course offerings currently consist of over 40 high school courses, including all required courses at the grades 11 and 12 levels as well as many optional and advanced level courses. This allows students to access courses that, because of scheduling conflicts, illness, or limited course availability in their own schools, might not otherwise be available to them.

New Brunswick Virtual Learning Centre (NBVLC), which is constantly being improved, updated, and expanded, emphasizes a facilitated learning approach. In such an approach, online teachers use online course chat rooms, discussion boards, email, and video conferencing to engage students in the learning process as well as to answer specific queries students may have. Local facilitators are on hand at the students’ schools to ensure that the students can access and use all the tools and equipment they need to complete the course. Students, for their part, work independently, completing online interactive activities, assignments, and tests as they progress through the course.

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[Semester 1 Course Availability](https://www2.gnb.ca/content/gnb/en/departments/education/k12/content/anglophone_sector/elearning/distance/semester_1.html)

[Semester 2 Course Availability](https://www2.gnb.ca/content/gnb/en/departments/education/k12/content/anglophone_sector/elearning/distance/semester_2.html)

# Specific Graduation Requirements For 2024 and 2025

* Appropriate Achievement or above on the English Language Proficiency Assessment (ELPA).
  + First attempt in Grade 9, rewrites in Grade 11 and 12 if necessary.
* Compulsory courses (Total 7 credits)
  + English 11 (two semesters, 2 credits)
  + English 12 (one semester, 1 credit)
  + Math (any two listed courses, 1 credit each for a total of 2 credits)
  + Humanities (one semester, 1 credit[[1]](#footnote-1))
  + Science (one semester, 1 credit)
  + Fine Arts & Life Development Course (one semester, 1 credit)

## Course availability and rotations[[2]](#footnote-2)

Math – The following courses offered at JCS will meet the two required Math credits:

* Numbers, Relations, and Functions 10
* Financial and Workplace Math 11
* Financial and Workplace Math 12
* Foundations of Mathematics 11
* Foundations of Mathematics 12
* NBCC Math 1208 Dual Credit Skilled Trades Math 12
* Verify Math Pathways to choose appropriately.

Fine Arts/Life Role Development - The following courses offered at JCS will meet the one required fine arts/life role development credit:

* Visual Arts 11
* Dramatic Arts 11 or 12
* Individual and Family Dynamics 12
* Co-Operative Education 12
* Outdoor Education 11
* Leadership Through Physical Education and Recreation 12
* Wellness Through Physical Education 11
* Growth Goals & Grit 12
* Entrepreneurship 11
* Reading Tutor 12
* Nutrition for Healthy Living 12
* Culinary Technology 11/12
* Framing and Sheathing 11
* Intro to Electronics 11
* Introduction to Applied Technology 110
* Mill and Cabinet 12
* Wellness Through Physical Education 11
* Career Exploration 11
* Fashion Tech 11/Design 12
* Fine Arts 11
* Music 11/12

Science - The following courses offered on a rotational basis at JCS will meet the one required science credit:

* Physics 11/12
* Biology 11/12
* Chemistry 11/12
* Intro to Environmental Science 12
* Introduction to Electronics 11
* Physical Geography 11
* Human Physiology 11

Science course rotation (specific to Chemistry, Biology and Physics):

|  |  |  |
| --- | --- | --- |
| Year | 2023-2024 | 2024-2025 |
| Semester 1 | Chemistry 12, Physics 11, Biology 11 | Chemistry 11, Physics 11, Biology 11 |
| Semester 2 | Physics 12, Biology 12 | Chemistry 12, Biology 12 |

Humanities – The following courses offered at JCS will meet the one required humanities credit:

* Modern History 11
* Indigenous Studies 12
* World Issues 12
* Canadian History 12
* Ancient and Medieval History 11

Humanities course rotation:

|  |  |  |  |
| --- | --- | --- | --- |
| Year | 2023-2024 | 2024-2025 | 2025-2026 |
| Semester 1 | Modern History 11  Indigenous Studies 12 | Ancient and Medieval History 11  Canadian History 12 | World Issues 12  Indigenous Studies 12 |
| Semester 2 | World Issues 12  Canadian History 12 | Indigenous Studies 12  Modern History 11 | Modern History 11  Ancient and Medieval History 11 |

French Immersion Humanities course rotation:

|  |  |  |  |
| --- | --- | --- | --- |
| Year | 2023-2024 | 2024-2025 | 2025-2026 |
| Course | FI Modern History 11 | FI Ancient and Medieval History 11 | FI Modern History 11 |

Skilled Trades - The following courses offered at JCS will be offered on rotation unless numbers are warranted to offer it each year.

|  |  |  |  |
| --- | --- | --- | --- |
| Year | 2023-2024 | 2024-2025 | 2025-2026 |
| Courses | Residential Finish 120  Electrical Wiring 120 | Framing and Sheathing 110  Mill and Cabinet 120 | Residential Finish 120  Electrical Wiring 120 |

# Specific Graduation Requirements – 2026 and beyond

As of 2026, graduates must:

· have met learning requirements prescribed in Grade 9 curriculum

· have completed compulsory credit-hours[[3]](#footnote-3) in grades 10 through 12

· have accumulated 100 credit-hours to apply for graduation[[4]](#footnote-4)

· have developed a career-life plan in myBlueprint

Students can begin to accumulate credit-hours in courses once they have met the learning requirements prescribed for the Grade 9 curriculum in the corresponding subject area or equivalent. Students may be eligible to graduate prior to June 2026. Students are required to accumulate the minimum credit-hours in each of the 7 subject area clusters and acquire a literacy credential by achieving a successful rating on the English Language Proficiency Assessment[[5]](#footnote-5). Courses can only meet the requirements of a single cluster. The minimum acceptable grade of 60% or pass is required in the learning expectations for high school credit-hours.

Students are required to accumulate:

* 80 total credit-hours from the list of compulsory courses and options in the cluster areas. (72 credit-hours from list of compulsory outcomes + 8 credit-hours from any cluster),
* a minimum of 20 additional credit-hours which may include [elective courses](#_Flexible_options_for), up to 8 credit-hours from Challenge for Credit Courses, 4 credit-hours for Independent Study, and/or 8 credit-hours for Locally Developed Courses.
* In addition, French Immersion students must complete 50% of the Grade 9 curriculum and 40 credit-hours in French Immersion courses in their Grades 10, 11 and 12.

Diagram

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## Cluster Descriptions

[**Language Arts and Languages**](#_Languages_and_Literature) courses prepare learners to develop communication skills; decode, understand, evaluate, and write; access information via oral histories, text, or media; make and receive meaning; make connections and judgements; form hypotheses, analyze, and synthesize; compose and create texts; enhance creative thinking; and foster an understanding and appreciation for languages and cultures.

[**Humanities**](#_Humanities) courses prepare learners to be active and informed citizens. They are designed to engage learners with principles of democracy such as freedom, equality, human dignity, justice, rule of law, human rights, and civic responsibilities. They provide opportunities to examine multiple worldviews, experiences, and approaches to engage with historical and contemporary issues and dilemmas. In Humanities courses, learners examine issues involving individuals, societies, their environments, and the interrelationships between human and natural systems. They prepare learners to question and respond to these issues critically and creatively. Components of a humanities course include building capacity to work with disciplinary skills, concepts, tools and methods in civics, geography, history, economics, Indigenous worldviews and perspectives, law, politics, and sociology.

[**Mathematics**](#_Math)courses prepare students to: use mathematics confidently to solve problems; communicate and reason mathematically; appreciate and value mathematics; and make connections between mathematics and its applications. Components of a math course include building capacity to apply understanding of change, constancy, number sense, patterns, relationships, spatial sense, and uncertainty.

[**Science**](#_Sciences)courses prepare students to: hypothesize; inquire, pursue, acquire, and apply knowledge about the physical and natural world; be curious; plan, create and action change; apply a systematic methodology based on scientific evidence and grounded in observation and experimentation; find problems and make decisions by critical evaluation of evidence and applying knowledge and evidence to novel situations; apply science values and attitudes.

[**Creative Arts**](#_Creative_Arts)The concepts Create, Connect and Communicate are central to learning in and through Creative Arts. Create refers to the learner’s ability to create artistic works, compose music, sing, play instruments, and perform individually or within a group. Create also balances process with product. Connect and Communicate refers to the learner’s ability to analyze, appreciate and evaluate creative arts. Through prescribed Creative Arts courses, learners develop skills and concepts related to drama, music, and visual art. Learners also develop confidence as performers and creators; develop understanding of the role of the arts in society and its power to effect change; practice respect for varying opinions and tastes; and potentially discover lifelong learning pathways.

[**Wellness and Physical Education**](#_Wellness_and_Physical)Wellness courses prepare students to: make informed decisions, recognize personal health and growth, develop positive relationships, and be an advocate for inclusivity. Components of a wellness course include healthy lifestyle, mental fitness, positive relationships, understanding stages of human growth and development and connecting to future pathways.Physical education courses prepare students to: engage in goalsetting, enhance physical, emotional, and social well-being, and understand the importance of cooperative participation in physical activities. Components of a physical education course include movement skills and concepts, strategies and tactics, and well-being.

[**Career-Connected and Occupational Learning**](#_Career_Subcluster) prepares learners to: develop an informed vision for the future linked to their interests, preferences, values, and abilities; critically investigate the labour market and career pathways that learners expect to find most fulfilling; and learn about career pathways of interest by engaging in frequent ongoing career-connected experiential learning.

[**Information Communication Technology**](#_Information_and_Communication) courses are designed for students to learn about a diverse set of digital technologies used to create, store, share or exchange information. The technologies include both hardware (physical devices) and software (instructions for devices). Most familiar technologies include computers, computer languages, internet and digital communications, cybersecurity, and software (apps) associated with these devices.

[**Skilled Trades**](#_Skilled_Trades_Subcluster) courses prepare learners to become self-reliant, understand the applied principles of math and science, develop creativity, find their strengths, and obtain skills that can lead to a career in the trades.  Components of a Skilled Trades course include developing self care practices, design and plan reading, manipulating shapes and patterns, acquisition of trade specific skills, construction of a product to satisfy a need or solve a problem and career exploration.

## Core Cluster Chart

|  |  |  |  |
| --- | --- | --- | --- |
|  | Core Clusters | Required Credit-hours | Compulsory Courses[[6]](#footnote-6) |
| Language Arts and Languages | 24 credit-hours | PIF/FILA 10, ELA 10 Foundational, ELA 11 Foundational, ELA 12 (all of these are 4 credits hours) AND 8 credit-hours of options from Language Arts and Languages[[7]](#footnote-7)  Note: See [Course Options Section](#_Cluster_Requirements_and) for choices available to Newcomer and Indigenous students[[8]](#footnote-8). |
| Humanities | 8 credit-hours | Civics 10 and 4 credit-hours from Designated History Course List |
| Mathematics | 12 credit-hours | Geometry, Measurement and Finance 10 and 8 credit-hours from Math Course List |
| Science | 8 credit-hours | Options from Science Course List |
| Personalized Well-Being | Creative Arts | 4 credit-hours | Options from Creative Arts Course List |
| Wellness and Physical Education | 4 credit-hours | Options from Wellness and Physical Education Course List |
| Career-Connected | 4 credit-hours | Options from Career, Information Communication Technology, Occupational, and Skilled Trades Course List |
| Options from the three Personalized Well-being Clusters | 8 credit-hours | Creative Arts, Wellness Physical Education,  Career, Information Communication Technology, Occupational, and Skilled Trades Course Lists |
|  | Core Cluster | 8 credit-hours | Options from any of the following core clusters: Language Arts and Languages, Humanities, Mathematics, Science, Creative Arts, Wellness and Physical Education, Career-Connected |
|  | **Clusters Credit-hours Total** | **80 credit-hours** | **Prescribed Courses Only** |
|  | **Flexible Credit-hours Total** | **20 credit-hours** | **Includes all Options for Credit** |
|  | **Minimum Total Credit-hours for Graduation** | **100 credit-hours** | **To apply to graduate** |

## Cluster Requirements and Course Options[[9]](#footnote-9)

|  |  |
| --- | --- |
| **Language Arts and Languages** | **Required: 24 Credit-hours and successful completion of the English Language Proficiency Assessment**  **Compulsory:**   * **PIF/FILA 10 (4CrH)** * **Grade 10:** ELA 10 (Foundations, Literary/Informational) (4CrH) and/or EAL Essentials A1.1 – Expressions B1.2 * **Grade 11:** ELA Foundational 111/2/3 (4CrH) and/or EAL Essentials A1.1 – Expressions B1.2 * **Grade 12:** ELA 121/2/3 (4CrH)   **8 credits from the following Options:** Literary Text 10/11, Informational Texts 10/11, ELA Extended 10/11, EAL Essentials A1 – Expressions B1, FILA 110/120, Post-Intensive French 110/120, Intro/Intermediate Mi'kmaw 110, Intro/Intermediate Wolastoqey 110, Writing 110, Canadian Literature 120, Journalism 120, Media Studies 120\*[[10]](#footnote-10) (FI/FSL), Mandarin 12A/12B, Reading Tutor 120, Spanish 110/120, French as an Additional Language A1.1/A1.2, Techniques de communication 110/120, and approved AP/IB[[11]](#footnote-11) Language Arts and Languages Courses |
| **Humanities** | **Required: 8 Credit-hours from the Humanities**  **Compulsory: Civics 10 (FI) (4CrH)**  **4 Credit-hours from one of the following designated History courses\*:** Ancient and Medieval History 111/2/3 (FI), Canadian History 121/2/3 (FI/FSL), Indigenous Studies 120, Modern History 111/2/3 (FI), World Issues 120 (FI/FSL)  *\*Note: for Newcomers who arrived in New Brunswick at age 14+, and have ELL proficiency of CEFR A1-B1: Canadian Identities 9 may be 4 credit-hours*  **Optional Humanities Courses for Core Cluster Requirement** choice from the designated history course list, Canadian Geography 120 (FI/FSL), Economics 120 (FI/FSL), Law 120 (FI/FSL), Political Science 120, Sociology 120, and approved AP/IB Humanities Courses |
| **Mathematics** | **Required: 12 Credit-hours from the Mathematics**  **Compulsory: Geometry, Measurement and Finance 10 (FI) (4CrH)**  **8 Credit-hours from the following Options:** Number Relations and Functions 10 (FI), Financial and Workplace Mathematics 110/120 (FI/FSL), Foundations of Mathematics 110/120 (FI/FSL), Pre-Calculus 110 (FI/FSL), NBCC Math 1208 Dual Credit Skilled Trades Math 120, Pre-Calculus 120A/B (FI/FSL), Calculus 120 |
| **Sciences** | **Required: 8 Credit-hours from Science**  **No compulsory courses**  **8 Credit-hours from the following Options:** Science for Sustainable Societies 10 (FI), Environmental Geoscience 110, Biology 111/2 (FI/FSL), Biology 121/2 (FI/FSL), Chemistry 111/2 (FI/FSL), Chemistry 121/2, Physics 111/2 (FI/FSL), Physics 121/2, Human Physiology 110, Introduction to Electronics 110, Advanced Environmental Science 120, Introduction to Environmental Science 120 (FI/FSL), Auto Electrical Systems 120\*, Forestry 110\*, Agriculture 110\* Approved AP/IB Science Courses |
| **Personalized Well-Being** | **Required: 20 Credit-hours total from Personalized Well-Being, 4 Credit-hours from each subcluster and 8 Credit-Hours of choice.**  **Creative Arts**  **Compulsory Creative Arts 4 Credit-hour minimum:**  **Preferred Options for Scheduling:** Creative Arts 110, Dramatic Arts 110/120 (FI/FSL), Graphic Art and Design 110, Music 10 (FI), Music 111/2 (FI), Music 120, Music 122, Visual Arts 10 (FI), Visual Arts 110 (FI) or 120, Fashion Technology and Design 110/120\*, Media Studies 120\* (FI/FSL), Digital Production 120\* (FI/FSL), Approved AP/IB and Locally Developed Creative Arts courses. |
| **Wellness and Physical Education**  **Compulsory Wellness and Physical Education 4 Credit-hour minimum:**  Health Care 110, Nutrition for Healthy Living 120, Outdoor Education 110 (FI/FSL), Physical Education 10, Psychology 110/120, Wellness through Physical Education 110 (FI/FSL), Sport and Recreation Leadership 120 (FI/FSL), Child Studies 120, Human Services 110, Individual Family Dynamics 120 (FI/FSL), Approved AP/IB and Locally Developed courses |
| **Career Connected**  **Compulsory Career, Information Communication Technology, Occupational, and Skilled Trades 4 Credit-hour minimum:**  **Career:** Career Pathway Design 10 (FI/FSL), Coop 120 (FSL), Goals, Growth, and Grit 120, Pre-apprenticeship 1, 2, and 3 (Summer Learning Only)  **Information and Communication Technology:** Computer Aided Design 110, Computer Science 110/120, Cybersecurity and Technology Support 110, Cybersecurity 120, Digital Production 120\* (FI/FSL), Information Technology 120, Robotics and Automated Technology 120  **Occupational:** Agriculture 110\*, Business Organization and Management 120, Early Childhood Services 110 and/or 120, Entrepreneurship 110 (FI/FSL), Fashion Technology and Design 110/120\*, Forestry 110\*, Housing and Interior Design 120, Hospitality and Tourism 110, Intro to Accounting 120, Marketing 120, Develop and Lead 110  **Skilled Trades:** Automotive Electrical Systems 120\*, Culinary Technology 110/120 (FI/FSL), Electrical Wiring 110/120, Framing and Sheathing 110, Internal Combustion Engines 110, Intro to Applied Tech 110 (FI/FSL), Metals Fabrication/Welding 110 (FI/FSL)/120, Metals Processing 110/120 (FI/FSL), Mill and Cabinet Work 120, Power Train and Chassis 110, Residential Finish 120, Tune-up and Emissions 120 |

Calendar

Description automatically generatedMathematics Pathways – Prerequisites are recommendations and encouraged. For more information please visit [here](C://Users/jessica.cyr2/Downloads/New%20Brunswick%20High%20School%20Mathematics%20Pathways.pdf).

# Essential Skills Achievement Pathway

The [Essential Skills Achievement Pathway](https://www2.gnb.ca/content/gnb/en/departments/education/k12/content/esap.html) (ESAP) Program is a student driven high school graduation program focussed on skills-based learning, knowledge acquisition and experiential learning opportunities. This program prepares students for a post-secondary education, apprenticeship, or the world of work.

The program consists of personalized learning opportunities that allow students to explore their skills, talents, abilities, and interests while intentionally attaining the 9 federally identified Essential Skills. Proficiency in these skills is demonstrated and evaluated through problem and project-based learning in the essential skills classroom, content specific courses, community experiential learning and workplace opportunities.

The ESAP program prepares students for the current skills-based economy as well as future work, learning and life. The experiential, problem and project-based learning environment positions the student at the center, and the teacher as a trusted mentor and guide on the side. This program gives students the opportunity to drive their own learning, prepare for the current skills-based economy and be best positioned to engage in future work, learning and life.

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**How do students become part of the ESAP program?**

Contact the school guidance office and/or administration. Applications are reviewed on an ongoing basis. Potential candidates will be interviewed. Note that enrolment is limited.

The Structure of the Essential Skills Achievement Pathway

* Beginning second semester Grade 10, students complete a foundational learning block to ground them in problem and project based essential skill learning.
* When attained, students move into their personalized post-secondary pathway or workplace readiness pathway, based on their skills, talents, abilities, and preferred future.
* Essential Skills students are scheduled in a 2-period block for their foundational learning and afterwards their personalized pathway.
* Schedules are then filled with other course selections that support the student in achieving their chosen pathway (for example: Intro to Electronics 110 for a student following the Post-Secondary Electrical pathway)
* To finish the *post-secondary education pathway (ESAP-PSE)*, students complete a Capstone project, which allows them to showcase their achievements throughout the pathway.
* To finish the *workplace entry pathway (ESAP-WE)*, students engage directly with the workplace for an extended 400-hour placement during school hours.
* Once the student has successfully completed all three components within their pathway, the graduation pathway is complete. This usually requires 2.5 years of engaged demonstration of learning.

POST-SECONDARY EDUCATION PATHWAY (ESAP-PSE)

Repositions students within the learning process and recognizes shared ownership for learning where students are actively involved in setting learning targets and timeframes, planning learning paths and tracking progress, and determining how learning will be demonstrated. Students will attain mastery level in the Essential Skill Foundational Learning Block, achieve mastery level in one of the designated [Post-Secondary Education Achievement Pathway Blocks](https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/esap/post-secondary-pathways.pdf) and demonstrate a minimum level two complexity capstone project in their field of study.

WORKPLACE ENTRY PATHWAY (ESAP-WE)

Repositions students withing the learning process and recognizes shared ownership for learning where students are actively involved in setting learning targets and timeframes, planning learning paths and tracking progress, and determining how learning will be demonstrated. Students will also engage in experiential learning in the workplace. Pathway Block options are listed [here](https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/esap/current-workplace-entry-pathways.pdf).

# Course Descriptions

## Languages and Literature

Canadian Literature 12:The goal of the Canadian Literature 120 curriculum is to promote an interest in important Canadian literature and other creative texts. The course is for students who demonstrate an interest in literature and deconstructing texts, and who wish to explore Canadian identity through a variety of literary texts worthy of study and appreciation.

English 10 - Foundations: In grade 10, English Language Arts students are expected to listen, view, read, and discuss increasingly complex information and literary texts, representing a variety of voices, for enjoyment, learning and personal understanding, collaboratively and independently. With an emphasis on Canadian content, including works by Black, Indigenous and racialized people, students will be exposed to a wide variety of texts representing diverse voices and perspectives (e.g., LGBTQ2S+, neurodiversity, age, gender, ethnicity, culture, religion, and ability). Students show increasing sophistication in selecting specific strategies to meet their needs while interacting, reading, and representing. They understand the learning process and strategies that work for them when creating a variety of texts. A text is not just the written word—other examples include an oral story, a musical score, a piece of art, a mathematical equation, a dance, a chemical formula, a game, a network of linked web pages, an advertisement, a video, and an outfit. Lessons are designed to allow for differentiation and support, so all learners have access to equitable learning experiences.

English 10/11 – Literary: Developed for students wishing to pursue the study of English Language Arts, which is based upon provincial appropriate achievement standards and the provincial framework for Literary Texts. This English course provides a variety of experiences with language and texts to develop competencies in speaking, listening, reading, viewing, writing, and other ways of representing. English level 3 courses may differ in terms of pace, scope emphasis and resources from level 2, but all students in all levels work toward meeting the same provincial English Language Arts outcomes. Goals will be established for each of the following: speaking, listening, reading, viewing, writing, and other ways of representing.

English 10/11 – Informational:Developed for students wishing to pursue the study of English Language Arts, which is based upon provincial appropriate achievement standards and the provincial framework for Informational Texts. This English course provides a variety of experiences with language and texts to develop competencies in speaking, listening, reading, viewing, writing, and other ways of representing. English level 3 courses may differ in terms of pace, scope emphasis and resources from level 2, but all students in all levels work toward meeting the same provincial English Language Arts outcomes. Goals will be established for each of the following: speaking, listening, reading, viewing, writing, and other ways of representing.

English 10/11 – Extended:This is an elective one semester course. It is designed to extend a student’s English Language Arts learning based on their interests, needs, and strengths.

English 12: Developed for students wishing to pursue the study of English Language Arts, which is based upon provincial appropriate achievement standards. This English course provides a variety of experiences with language and texts to develop competencies in speaking, listening, reading, viewing, writing and other ways of representing. English level 3 courses may differ in terms of pace, scope emphasis and resources from level 2, but all students in all levels work toward meeting the same provincial English Language Arts outcomes.

English as an Additional Language Essentials to Expressions A1.1-B1.2:These courses will build essential English skills in the areas of speaking, listening, reading, and writing through meaningful and authentic task-based learning. The focus is placed on communicative tasks required for common social interactions and immediate needs. In addition to focusing on oral communication skills, high frequency language, and essential vocabulary, reading and writing are supported explicitly through foundational literacy skills. These courses provide students with essential strategies for successful English-language learning and cultural competency.

French as an Additional Language - Essentials A1.1/A1.2:This course will build essential French skills in the areas of listening, speaking, reading, and writing, with a particular focus on building foundational literacy and communicative skills. In addition to focusing on foundational literacy and basic oral communication skills, this course provides the opportunity for students to learn common social interactions and the skills required to meet immediate needs.

French Immersion Language Arts 110: Students will continue to expand their facility in oral and written French to ensure the maintenance and progression of the linguistic skills and increase students’ cultural knowledge and experiences. Students will be able to present a debate and participate in group role play scenarios.

French Immersion Language Arts 120: Students will continue to expand their facility in oral and written French. To realize the main objectives of the course, there will be exposure to various texts, activities, and novels, in the final preparation for the interview to determine students’ level of competency in French second language.

Intro/Intermediate Mi’kmaw 110: These are introductory and intermediate level language courses with an emphasis on conversational skills. Students will learn and practice language through conversations, games, and written assignments. Students will have a general understanding of the nature and function of the Mi'kmaw language that will enable them to communicate using the language. Students will also develop an understanding and appreciation of the Mi'kmaw language as an expression of a distinctive culture.

Intro/Intermediate Wolastoqey Latuwewakon 110**:** These are introductory and intermediate level language courses with an emphasis on conversational skills. Students will learn and practice language through conversations, games, and written assignments. Students will have a general understanding of the nature and function of the Wolastoqey language that will enable them to communicate using the language. Students will also develop an understanding and appreciation of the Wolastoqey Latuwewakon language as an expression of a distinctive culture.

Journalism 120: Journalism 120 will develop student expertise in concise and accurate writing. It offers opportunities to practice critical thinking, writing, and representing skills in a variety of real-world situations. The course emphasizes the role of a journalist to bear witness, to document, and to provide a narrative of the daily life of a society and the world. Students will develop a deeper understanding of the importance of well-informed literate citizens to maintain a democratic society. They will think critically, work cooperatively and collaboratively, discuss, and deconstruct relevant issues, research, write persuasively and understand news values.

Mandarin 12A/12B:Students learn about the daily life and lifestyle of the Chinese people, Chinese tradition, education, food, history, and cross-cultural communication. Students will be able to speak Mandarin at a basic conversational level and be able to read, write and recognize more than 150 basic Chinese characters.

Media Studies 120 (FI/FSL): Media Studies 12 introduces students to the evolution and impact of mass media on the individual and society. The course, both academic and practical, emphasizes the content and processes of media. Students will study six modules, four being compulsory: Introduction to Media, Film/Video, Television and Advertising and two optional ones to be chosen from a teacher-created listing.

Post-Intensive French 110/120: These courses continue the sequence of Post Intensive French courses. These courses extend the range of language skills, structures, and concepts for effective communication in French in a variety of situations. Post-Intensive French is a literacy-based, non-immersion program for students choosing to continue to learn French as a second language. Themes at the grade 11 level include mysteries, injustices, and the power of photography. Themes at the grade 12 level include looking to the future, ecological challenges, similarities and differences and careers. *\*Note also that if a student achieves a level of intermediate at the end of grade 10, he or she may select to enroll in French immersion courses (including online options) in addition to or in place of Post-Intensive French courses in grades 11 and 12.*

Reading Tutor 120: Under the guidance of the instructor, tutors work on a one-to-one basis with students who are seeking to raise their reading level to improve their writing skills. Tutors learn basic reading theory and teaching techniques and are assigned one student to work with for the term. A real commitment is required (in attendance and day by day planning) since the student depends on the tutor. This is a chance to make a positive contribution to our school, to acquire leadership skills, and to experience a real-life teaching situation. This course is recommended for those planning careers in education, guidance, or the social services.

Spanish 110/120: Spanish 110 employs an interactive tutorial method of course delivery to introduce students to the basic elements of the Spanish language and Hispanic culture. Students will have the opportunity to practice the language and learn through live, online group sessions. Course themes, including *Who Am I?, My Friends, My Family, My House* and topics for virtual partner projects have been selected with the interests of the student in mind. Spanish 120 builds on this learning.

Techniques de communication orale 110/120**:** This course is open to students who wish to improve their oral and written skills in French. The program includes a variety of communication activities. The oral component is a very important aspect of the course.

Writing 110:Writing 110 is an elective course designed for students who may need extra practice developing competence in composing skills and for those students who want to further their existing proficient writing skills to prepare them for higher level English courses and for university and community college. There is an emphasis in this course for students to further develop their creative writing skills. This course includes an exit project.

## Humanities

Ancient and Medieval History 11 (FI):Ancient and Medieval History 110 addresses big ideas in civics and Indigenous perspectives and ways of knowing through the study of the distant past. It fosters thoughtful and engaged citizenship through the examination of enduring human issues and questions. The course engages students by presenting them with exciting content and issues that help to explain the world around them today.

Canadian Geography 120 (FI/FSL):This course is a study of the ever-changing cultural and physical landscapes of Canada and how they impact on each other. It considers where things are, why they are there, and the significance of these with respect to future patterns. Included is an examination of environmental and Canadian geographical issues that are currently pertinent to the lives of Canadians. Students will use a wide range of information and skills to project a vision of Canada in the future.

Canadian History 12 (FI/FSL)**:** The objective of Canadian History 12 is to examine the socio-economic, political, and cultural development of post-Confederation Canada. Various themes will be explored throughout the course including nationalism, regionalism, immigration, imperialism, industrialization, and urbanization.

Civics 10 (FI): This course focuses on the elements required to bolster this participation: citizenship, democratic processes, and fundamental human rights and freedoms. To preserve a healthy democracy, students must be prepared to examine how power is gained, used, and justified. They must also be prepared to support the protection of individual and collective rights and freedoms ensured within the context of constitutional democracy. This includes digital citizenship (embedded within this is media literacy) as well as data literacy (mathematics skills for civic decision-making such as proportional reasoning, statistics, graph theory).

Economics 120 (FI/FSL): Economics 120 examines economic theory and practice. Students will analyze fundamental economic concepts including the interaction of supply and demand, the fundamentals of money and banking, producing, and trading. The course will provide students with a basic understanding of our Canadian economic system and will explore the various factors that affect economic decision-making as individuals and as groups.

Indigenous Studies 120:The objective of this course is to provide a clear understanding of First Nation Culture, History and Traditions in the past, present and hope for the future. The student will have a greater awareness of First Nation way of life as well as their inherent relationship with the environment. The units that will be offered are the Significance of Legends, the Value of Traditional Teachings, and the importance of Governance and Spirituality.

Law 120 (FI/FSL): Law 120 introduces students to general concepts of Canadian law and the justice system, while developing students’ abilities to reflect critically on the role of law in society. Students will develop the skills required to clearly express ideas, to argue effectively for both the prosecution and the defense, and accurately interpret the written word. The course consists of five modules: Foundations of Law, Criminal Law, Civil Law, Family Law, and Succession Law.

Modern History 11 (FI): This course provides the opportunity for students to engage with citizenship concepts crucial to the functioning of a democracy and explore how they have appeared over time. Students will use historical thinking concepts to inquire about and investigate major events in Western history that have shaped how the world functions today. Topics will include the French Revolution, Industrialization, WWI and WWII, the Holocaust, and post WWII era. This content will be used to practice the skills to support the historical thinking concepts with a focus on making connections to present day events and issues. Modern History 113 is designed to provide an understanding of the main events of the twentieth century, as well as some familiarity with a few of the basic skills used to interpret historical accounts. A survey approach is given to the following topics: Basic World Geography, French Revolution, Industrialization, Life in the 1920's and 1930's, World War I, World War II, Cold War and United Nations.

Political Science 120:Political Science 120 is an introductory political science course designed to develop an understanding of various political ideologies and systems, as well as the ability to assess the merits of each and to make comparisons. Canadian municipal, provincial, and federal governments will be examined, as will various international bodies, especially the United States. This course is particularly useful for students planning university study in the Humanities.

Sociology 120: This course is designed to increase awareness of how humans develop as social beings and examines society’s institutions in terms of the values and attitudes that enter group action. The course will provide background for the study of contemporary rapid social change as well as the cultural origins of existing social patterns. Areas of study will include the social problems presently confronting Canadian society such as crime, race and ethnic relations, urbanization, poverty, gender, and societal constructs.

World Issues 120 (FI/FSL):World Issues 120 examines various issues that are global in nature and that require a global solution. The concept of the global village is studied as is the relationship between nations as players in the global community. Various issues are examined to acknowledge the fact that events in any part of the world can have a profound effect on Canada. The future of Canada within the global community is also examined.

## Mathematics

Geometry, Measurement and Finance 10 (FI):This course will focus on:

* Geometry: the Pythagorean theorem and trigonometry
* Measurement: conversions and 1 and 2-dimensional measurements
* Finance: earning and spending money.

There are also two optional units, one working with angles and the other exploring 3-dimensional geometry. Students will have the opportunity to complete practice exercises and check their understanding with weekly quizzes and assignments.

Calculus 120: This is the last course offered in Pathway 4 and follows Pre-Calculus B 120. This course develops the concepts of average and instantaneous rates of change. Derivatives are determined by applying the definition of a derivative and the derivative rules including the Chain Rule and are determined for trigonometric functions. Limits and derivatives of exponential and logarithmic functions are found. Calculus techniques are used to sketch graphs of functions, and to solve optimization problems. Problems are solved involving inverse trigonometric functions, involving related rates, and involving the application of the integral of a function from a variety of fields. The definite integral and the antiderivative of a function are determined. This course is recommended for students interested in post-secondary programs in science, engineering, and mathematics, though it may not be a required entrance requirement.

Financial and Workplace Mathematics 110 (FI/FSL): This course is the first of two courses in Pathway 1 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.

Financial and Workplace Mathematics 120 (FI/FSL):This course is the second of two courses in Pathway 1 designed for entry into post-secondary trades and technical programs, or for direct entry into the work force. Outcomes relating to measurement instruments, problem solving with shapes, problem solving using sine and cosine laws, transformation of shapes, logical reasoning, small business theory, linear relations, statistics, and probability.

Foundation of Mathematics 110 (FI/FSL): This course is a prerequisite for a second Foundations of Mathematics course in Grade 12, providing a pathway designed for entry into academic programs not requiring pre-calculus. It is also a pre-requisite for Pathway 3 and 4. Students model and solve problems involving systems of linear inequalities in two variables. Characteristics of quadratic functions are explored in depth including vertex, intercepts, domain, and range. Students develop logical reasoning skills and apply this to problems involving angles and triangles, the sine law, and the cosine law. Costs and benefits of renting, leasing, and buying are explored, and investment portfolios are analyzed.

Foundation of Mathematics 120 (FI/FSL):This is the second of two courses in Pathway 3 designed for entry into post-secondary academic programs not requiring pre-calculus. In statistics, students are introduced to normal curves, and learn to interpret statistical data, using confidence intervals, confidence levels, and margins of error. To develop logical reasoning, students analyze puzzles and games, and solve problems that involve application of set theory and conditional statements. The validity of odds and probability statements are assessed, and problems are solved that involve probability of two events, the fundamental counting principle, permutations, and combinations. The binomial theorem is used to expand powers of a binomial. Data is represented using polynomial functions, exponential and logarithmic functions, and sinusoidal functions to solve problems.

NBCC Math 1208 Dual Credit Skilled Trades Math 120:This course is the final course offered in Pathway 1 in the Graduation Pathways for Mathematics and follows Finance and Workplace Mathematics 110. This is a dual credit course. Successful students looking to acquire a post-secondary credit at a NBCC campus can complete a recognition of prior learning form at NBCC and may be awarded Math Foundations 1208 upon beginning their program of study. Topics of study include whole numbers, decimal number, fractions, ratios, proportions, measurement, and geometry. The focus of the course is to apply mathematics to a variety of trades-based applications and hand-on learning opportunities will be provided.

Numbers, Relations, and Functions 10 (FI): This is the beginning course for the graduation pathways for Mathematics 2, 3, and 4. It is designed to prepare students for Foundations 110 or Financial and Workplace 110. This is an algebra-based course. Students will create factor trees to find prime and common factors of various numbers. Students will demonstrate an understanding of the properties and laws of square and cube roots. The study of irrational numbers is continued. Students will solve problems involving the properties of exponents including integral and rational exponents. Students will solve problems involving polynomial expressions with a large focus on trinomial factoring. The study of linear relations and functions is continued with a focus on the slope formula, distance formula, and midpoint formula.

Pre-Calculus 110 (FI/FSL): This course in Pathway 4, followed by later courses in Pre-Calculus and Calculus, is designed for entry into post-secondary programs requiring Pre-Calculus. Topics include algebra and number, relations and functions, and trigonometry.

Pre-Calculus A 120 (FI/FSL): This course in Pathway 4 follows Pre-Calculus 110 and precedes Pre-Calculus B 120. Students demonstrate and apply an understanding of the effects of horizontal and vertical translations, horizontal and vertical stretches, and reflections on graphs of functions and their related equations. They are introduced to inverses of functions, logarithms, and the product, quotient and power laws of logarithms and use these laws and the relationship between logarithmic and exponential functions to solve problems. Students are introduced to angles in standard position, expressed in degrees and radians, and to the unit circle. The six trigonometric ratios and the sine, cosine and tangent functions are used to solve problems. First- and second-degree trigonometric equations are solved algebraically and graphically with the domain expressed in degrees and radians. Trigonometric identities are proven using reciprocal, quotient, Pythagorean, sum or difference, and double-angle identities.

Pre-Calculus B 120 (FI/FSL): This course in Pathway 4 follows Pre-Calculus A 120 and precedes Calculus 120. Students analyze arithmetic and geometric sequences and series to solve problems. They are introduced to concepts of probability including permutations, combinations, and binomial expansion. They learn to factor polynomials of degree greater than 2, and to graph and analyze polynomial functions. They also graph and analyze radical, reciprocal, and rational functions, building a function toolkit. Students are introduced to the concept of limits and determine the limit of a function at a point both graphically and analytically. They explore and analyze left- and right-hand limits as x approaches a certain value using correct notation, analyze the continuity of a function and explore limits which involve infinity.

## Sciences

Advanced Environmental Science 120: In this course students will explore the impact and the significance of the many ways that humans interact with the natural world, including exploration of indigenous and other ways of knowing the world. They will gain a deeper understanding of biosphere dynamics and importance of biodiversity. Students will study the composition and dynamics of soil, salt and freshwater systems, and the atmosphere and explore current environmental issues in agriculture, forestry, fresh and saltwater resources and fisheries, global warming, and air pollution. Students will be responsible for completing a project on an environmental issue of personal interest.

Agriculture 110: Agriculture 110 is a New Brunswick high school course intended to formalize course knowledge that was previously offered in some school locations as a local option course. The curriculum provides introductory Agriculture knowledge and skills, experiential learning opportunities, and culminates in a learner-led project proposal or business plan. The careers and technologies referenced in the course include New Brunswick practices over time as well as present contexts.

Automotive Electrical Systems 120\*:This course introduces the theory and operation of automotive electrical systems. Students will begin with a study of the basic principles of electricity, which includes electron theory, magnetism, and electrical symbols. They will then progress to the study of individual components throughout the vehicle.

Biology 11 (FI/FSL): Biology 11 is a one semester introductory course which is intended to better acquaint students with, and awaken their interest in, living things. Some topics for study include cell structure and function, biodiversity and classification, digestion, circulation and blood, respiration, excretory system, and immunity. To earn a Level 1 credit in Biology, students will be required to cover all essential and extension outcomes of 112 as well as additional requirements, such as independent research, presentation, and peer tutoring when possible.

Biology 12 (FI/FSL): Biology 12 is a one-semester course that is designed for students who plan to attend university. This course includes the following topics: genetics, evolution, the nervous system, the endocrine system, reproduction, and development. To earn a Level 1 credit in Biology, students will be required to cover all essential and extension outcomes of 122 as well as additional requirements, such as independent research, presentation, and peer tutoring when possible.

Chemistry 11 (FI/FSL):This course introduces students to matter, elements, compounds, chemical reactions, and the stoichiometric calculations associated with chemical reactions. Labs are used to reinforce the key concepts learned in this class. A credit in Chemistry may be required for certain programs at Universities and Colleges. To earn a Level 1 credit in Chemistry, students will be required to cover all essential and extension outcomes of 112 as well as additional requirements, such as independent research, presentation, and peer tutoring when possible.

Chemistry 12: Chemistry 12 is the second of two sequential university prep chemistry courses, the theory covered in this course will be displayed directly through applied mathematics. The topics include thermochemistry, solutions, kinetics, equilibrium, acids and bases, and organic chemistry. Labs are used to reinforce many of the concepts learned in class. To earn a Level 1 credit in Chemistry, students will be required to cover all essential and extension outcomes of 122 as well as additional requirements, such as independent research, presentation, and peer tutoring when possible.

Environmental Geoscience 110:In Environmental Geoscience 110, learners will consider how Earth systems change over time. Geographic science is applied to the arrangement, interaction, and change of physical/natural features and human activity on and near Earth’s surface including safer and more sustainable ways of searching for Earth resources, disposing of waste, selecting places to live and constructing new buildings, etc. Geomatics, a subset of geographic science, allows learners to explore technologies for collecting, managing, and analyzing data about Earth and phenomena arranged on and near its surface.

Forestry 110**[[12]](#footnote-12):** Forests and sustainable forest management have and will continue to play an essential role in the social, environmental, and economic wellbeing of the province. Forestry 110 will develop an appreciation and understanding of the societal values placed on forested ecosystems, how forests are managed to achieve these values, and the interactions between humans and forests. The learning outlined will promote literacy, knowledge, and skills to enable students to meaningfully engage in public discourse around forests and the forest sector. The course will also identify multiple career pathways within the forest sector for rewarding employment within the province of New Brunswick.

Human Physiology 110: The goal of this course is to build an understanding of the physiology of the human body. This course focuses on developing an understanding of the structure and functioning of each human body system, including the causes, symptoms, and treatments of diseases and conditions. This includes the ways in which the health of each system impacts on and is impacted by the health of the whole body. By the end of the 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 Electronics 110**:** The basics of electronic theory and components of electronic devices are the subjects of this course. Students learn through a series of lab activities including many types of Direct Current circuit construction. This course will be of interest to students exploring career opportunities in many skilled trades and those interested in many Engineering and technology disciplines. This course may be used as a science credit for graduation purposes.

Introduction to Environmental Science 120 (FI/FSL): The objective of this course is for students to develop the knowledge base skills for investigating and analyzing environmental issues and for communicating their knowledge and analysis to others. Students will be able to outline the ecological processes inherent in natural ecosystems and how these can be impacted by human activity. Identify the impact of personal behaviors on the environment, and recognize that caring for and sustaining natural environments is an element of responsible global citizenship, demonstrate an understanding of the importance of sustainable development, considering environmental, social, cultural, and economic aspects, to effectively resolve issues, analyze and propose solutions to current environmental issues through research, experimentation and a presentation of their findings with respect to the issue.

Physics 11 (FI/FSL)**[[13]](#footnote-13):**The topics covered are measurement, motion, forces, wave motion, sound, light, work, and energy. Students will have several laboratory sessions on these topics. In order to earn a Level 1 credit in Physics, students will be required to cover all essential and extension outcomes of 112 as well as additional requirements, such as independent research, presentation, and peer tutoring when possible.

Physics 12 (FI/FSL): Topics covered are vectors, circular motion, projectile motion, momentum, mechanics, universal gravitation, and fields. Students will have several laboratory sessions on these topics. To earn a Level 1 credit in Physics, students will be required to cover all essential and extension outcomes of 122 as well as additional requirements, such as independent research, presentation, and peer tutoring when possible.

Sciences for Sustainable Societies 10 (FI):This science 10 is a course that focuses on the nature of science and learning and living Sustainably. The nature of science involves students understanding the world through careful, systematic inquiry. Students discover that scientific knowledge produced through this process is both durable and subjected to change. Learning and Living Sustainably encompasses the students understanding that science affects and is affected by society. This is the recommended course option for students who plan to continue in Chemistry, Physics or Electronics.

## Personalized Well-Being

### Creative Arts

Creative Arts 110:Creative Arts 110 is an introduction to the Arts in general: a combination of Drama, Music, and Visual Art. Every culture utilizes drama, music, and visual art whether for entertainment, spiritual expression, or both. During this course students will discover how the Creative Arts are representative of different cultures and or different time periods. Students will also learn how all the Creative Arts are combined to produce spectacular productions. The emphasis is not on performance or production but rather on understanding how to perceive expressiveness through various art forms. Students will be expected to do some performing in front of their peers.

Digital Production 120\* (FI/FSL):Digital Production 120 offers students opportunities to produce different forms of media including websites, digital imaging, audio, and video production. Students will also explore ethical issues surrounding media production and consumption, copyright, and the appropriate use of copyrighted materials. Students will have flexibility in software selection, including a variety of open-source software, to complete required assignments and projects.

Dramatic Arts 110/120 (FI/FSL)**[[14]](#footnote-14)**: Dramatic Arts 110 is an introductory course designed for any student interested in developing skills related to creativity, performance, and production. This course is highly participatory and requires consistent attendance to facilitate the development of collaborative projects and student engagement in new experiences. Dramatic Arts 120 is a course that assumes an enhanced level of theatrical experience. In collaboration with their teacher and peers, students are encouraged to direct their learning and decide how to demonstrate the acquisition of skills.

Fashion Technology and Design 110/120\***[[15]](#footnote-15):** This course is designed to introduce and prepare students for possible careers in the fashion industry. It deals with the history of the Textile Apparel industry, characteristics and construction of fabrics, careers available and the skills required, plus basic construction and product assembly with the use of technology.

Graphic Art and Design 110:Graphic Art and Design 110 will provide the opportunity for learners to explore the skills, processes and knowledge involved in graphic art and design. This includes developing foundational skills such as drawing, understanding various media, working with principles and elements of art and design, and image manipulation. Students will produce and will be assessed on many projects that may include an original layout for a newsletter, catalogue, logos, and brochures as well as designing and crafting effective promotional pieces, publications, and digital art. Students will be introduced to creative problem solving and design processes to create art and design products. Learning expectations include a special emphasis on critical visual literacy in the industry of graphic art and design.

Media Studies 120\*(FI/FSL): Media Studies 120 offers students opportunities to experience and respond to many forms of media. It explores the impact and influence of mass media and popular culture by examining texts such as films and television shows, songs and advertisements, sports and games, packaging, and clothing, online and offline information sources, blogs, and social networking sites. By coming to understand how media texts are constructed and why they are produced, students will develop the skills needed to respond to these texts intelligently and responsibly when they encounter them. The organized study of the mass media increases students’ critical judgement, their awareness of the global village and its values, and their place in society. It promotes open-mindedness, effective communication, and organizational skills through repeated opportunities to view, listen, speak, read, write, create, and represent.

Music 10 (FI):Music 10 is a course that consists of skills and knowledge of what students should know and be able to do on completing their studies in music. They are organized under three strands 1) creating, making, and presenting 2) understanding and connecting contexts of time, place and community, and 3) perceiving, reflecting and responding. These three strands promote and support a balanced, comprehensive, and developmental music program.

Music 11 (FI): The goals of Music 11 are to offer students an opportunity to develop technical/performance skills on an instrument, to develop theory and aural skills, to further develop music literacy, to explore a variety of repertoire, to listen to and judge music with discrimination, to develop an understanding of musical expressiveness, form, and style, to develop skills of expression and personal interpretation and also to demonstrate improvement in all areas of musicianship.

Music 120:Music 120 has been designed to encourage research, presentations, discussions, and musical learnings in and about a variety of different world music.

Music 122: Music 122 is a performance-based course designed to encourage students to develop their musical skills through exposure to a variety of musical challenges and problems requiring creative and higher order thinking skills. Students will be required to work individually, independently, in small groups and in larger ensembles. Projects and research activities are encouraged to be activity based experiential learning. Students are encouraged to assume a large responsibility for their learning. Students will be exposed to a wide range of music for purposes of analysis, listening, historical research and performance. Students may be required to work outside the music classroom (Individual/ensemble practice, local concerts, studio rehearsal, etc.) as the manifestations of musical activities are many and varied. It is hoped that students will experience many of these opportunities.

Visual Arts 10 (FI): Visual Arts 10 is a course that provides students with a means to acquire a developmentally appropriate comprehensive art education through the three strands of General Curriculum Outcomes. The first strand is Creating/Making and Presenting. The second strand is Understanding and Connecting Contexts of Time, Place, and Community. The third strand is Perceiving, Reflecting, and Responding.

Visual Arts 110 (FI**)[[16]](#footnote-16)**: The visual experiences and technical processes in this course are organized in themes. These themes are designed to stimulate the imagination, encourage interpretation, expression, and development of personal imagery. Each unit of study will include art theory, art of different cultures and time periods, studio applications and experimentation in one of the following: Drawing, Painting, Printmaking and Sculpture, sketchbook assignments and critiques. Students are given opportunities to work independently and to explore, in greater depth, materials and concepts touched on in Visual Arts 10. There is a research presentation and an exit project requirement. Students are required to supply a sketchbook, art kit, and a portfolio. Students should have experience and/or interest in the Arts.

Visual Arts 120:Visual Arts 120 is designed for the student who has shown an intense interest in Art and who may be considering further education or a career in Art or an Art related field. The Grade 12 program focuses on 20th century Art and artists, and portfolio building. There is a major research presentation at mid-term and a final exhibition at the end of term. Students are required to supply sketchbooks, art kit and portfolio.

### Wellness and Physical Education

Health Care 110:This course introduces students to content and concepts related to health care and the healthcare system. Students will learn how the Canadian healthcare system works and will be introduced to various medical professionals that work within the system. Students will learn what it takes to be a professional within the different healthcare occupations. They will examine the rights of a healthcare consumer, develop an awareness of related environmental and societal issues and will begin to explore secondary and postsecondary pathways leading to careers in the field.

Human Services 110:The overall aim of Human Services is to increase students’ awareness of the importance of human service work. Inclusive communities and an aging population are creating many opportunities in the human service field. This course will develop work-related competencies and explore post-secondary learning, innovations, and careers in the human service industry.

Individual and Family Dynamics 120 (FI/FSL): This course will expose students to the skills and information necessary to make informed decision about personal development, lifestyle choices and healthy relationships.

Nutrition for Healthy Living 120: Nutrition for Healthy Living 120 is designed to make students aware of preventative strategies to contribute to overall wellness, make healthy food choices and maintain a balance between eating habits and physical activity. Current issues relating to chronic diseases, lifestyles and food technologies will also be discussed. Students will be encouraged to use reliable information to examine their eating habits and lifestyles choices.

Outdoor Education 110**[[17]](#footnote-17) (FI/FSL)**: The focus of this course is to develop personal outdoor recreation skills based on environmental ethics. Class outings are compulsory and may take place during class or for an extended period of time. The class will participate in several half day and full day outings we well as a mandatory overnight camping excursion. The course will take advantage of local outdoor adventure areas. Students must be prepared to plan, lead, and evaluate outing experiences from a personal and group perspective. Students are admitted to the course based on:

1. Strong attendance during the previous academic year.
2. Ability to work independently and collaboratively with minimal supervision.
3. Mature and responsible work ethic.

Physical Education 10: Physical Education 10 has both practical and theory components. Students alternate between the classroom and the gym to cover both parts of the course. The curriculum outcomes described below identify the skills, knowledge, and attitudes expected of students upon completion of their studies in physical education.

Psychology 110/120:As an introduction, students will begin to explore psychology as a social science that seeks to answer questions about how we think, feel and act. Students will learn to think critically as they explore human nature in depth. Topics include intelligence, nervous system, the brain, sleep and dreams, hypnosis, nature vs nature, personality, psychological disorders, research strategies, social relations, information processing, forgetting and memory construction, motivation and emotion, effects of stress, treatments for psychological disorders, classical and operant conditioning, and observation learning. Regular attendance and participation in class discussions is very important in this course. The final assessment for the course will be an exit project which will allow students to conduct a research experiment or survey on a topic of their choice.

Sport and Recreation Leadership 120:This course is an elective course intended for students who wish to develop leadership skills. The course will deal with the theoretical and practical aspects of leadership, characteristics and qualities of leaders, coaching, fitness, officiating, first aid, teaching, professional presentations, and evaluation. The “hands-on” component of the course will involve field trips, guest speakers, peer teaching, first aid certification and coaching certification. Students must complete 30 hours of community volunteer services provided in class to be successful in this course.

Wellness Through Physical Education 110 (FI/FSL): The goal of the Wellness through Physical Education 110 curriculum is to promote healthy active living for life. Students will experience a variety of wellness activities and are expected to create and implement a personal healthy active living plan. The course is intended to allow a broad-based exploration of various dimensions of wellness and encourage a healthy, balanced lifestyle.

Child Studies 120: This course is “a study of the most significant resource that we possess-children”. Child Studies 120 explores how children develop physically, socially, emotionally, and intellectually. Students will be required to do observations of children between the age of six months and five years. Thus, ongoing observations and experiences with children is an essential part of this program. Marks are based on observations, a scrapbook, and a final exam.

### Career, Information Communication Technology, Occupational, and Skilled Trades Options

#### Career Subcluster

Career Pathway Design 10 (FI/FSL): Career is the journey through life, learning and work. It encompasses much more than just employment. To achieve a sense of self and life satisfaction, each student requires personalized, equitable, and inclusive career pathway planning to secure their preferred future. The Career Pathway Design 10 course addresses this goal, amplifying learner agency, as informed by evidence-based research found in the New Brunswick Career Education Framework.

Career Exploration 110:Career Exploration 110 is an experiential course that offers a sequence of activities aimed at furthering the career skill development of youth in grades 11/12. Students explore personal characteristics, assess various career options, can engage in two unique work placements, and learn about themselves and about the world of work.

Co-operative Education 120 (FSL): Cooperative Education 120 provides students with an opportunity to explore a career that is of interest to them. They are placed in an on-the-job training experience that enables them to apply skills already learned in school or to learn new skills. The course requires two periods per day and is worth two credits. Interested students must complete an application form available from the Cooperative Education teacher or Guidance Department. Acceptance into the course depends upon the suitability of the student for training placement and the availability of placements.

Goals, Growth, and Grit: Skills for Success 120: Research has identified key factors that impact student success. These challenges are not specific to any one subject area but affect all learning opportunities and life demands. Reading and communication skills as well as self-regulation strategies impact success in school and life. Goals, Growth, and Grit: Skills for Success 120 is an elective course for students who intend to continue formal education in a post-secondary institution and for whom explicit and direct instruction with these key skills and strategies will build capacity to realize potential. Goals, Growth, and Grit will provide students with skills in three main areas – positive and productive mindsets and behaviors, organizational patterns, as well as functional and critical literacy. Within the broad learning expectations of the course, specific success skills, strategies, and practices will be explored. Students will be supported to apply and transfer these skills, strategies, and practices to other courses and real-life situations. Students will learn how these support postgraduate pursuits.

Global Competencies 120: This is a local option elective course that is divided into 5 sections. Introduction to the six New Brunswick global competencies, leadership skills and development, teambuilding in the 21st century, community partnerships and experiential leadership opportunities.

Pre-apprenticeship 1, 2 and 3 (Summer Learning Only):Pre-Apprenticeship is any activity that allows grade 10 -12 students to gain apprenticeable hours toward a skilled trade career after graduation. Experiential learning through pre-apprenticeship is support by highly skilled educators and mentors. Apprenticeable hours can be earned from high school skilled trades courses, a CO-OP or Career Exploration program in a skilled trades placement, by participation in a specialized skilled trades enhanced CO-OP program, participation in an Essential Skills Achievement Pathway (ESAP) in a Skilled Trade and through paid summer work experiences with NBTAP.

#### Information and Communication Technology Subcluster[[18]](#footnote-18)

Computer Aided Design 110:This is an introductory course in computer assisted drafting using AutoCAD LT. Students will work at a computer station to design and develop drawings to industry standards. The focus of this course is to commence with Mechanical Drafting and then complete the course with a unit in Architectural drafting. The last week of classes students will prepare a final presentation of their architectural project using Google Sketch-up.

Computer Science 110/120: Computer Science 110 teaches the fundamentals of structured programming and the program development cycle. Students will learn to use basic programming constructs to write simple programs using the Visual Basic programming language. More advanced topics, including graphics and animation. Computer Science 120 is recommended for students with a strong interest in computer programming. Students will learn the basic syntax of the Java language and write simple programs using object-oriented design principles. The course provides a good foundation for students who wish to pursue a post-secondary program in computer science.

Cybersecurity and Technical Support 110:This course will inspire students through the experiential learning of the fundamentals of computer and network systems, the activities and processes involved in technical support, and the defensive strategies from cybersecurity. In CSTS110, students will be actively engaged in the design, development and evaluation of technical support and cybersecurity projects, including awareness, concepts, and challenges.

Cybersecurity 120:In Cybersecurity 120, students will be actively engaged in the design, development, and evaluation of defensive cybersecurity projects, including awareness, concepts and challenges. The intent of this program of study is to have students discussing real-world case studies and learning in hands-on activities from day one, while maintaining a high level of engagement throughout the course through a commitment to problem-based and project-based learning.

Digital Production 120\* (FI/FSL):Digital Production 120 offers students opportunities to produce different forms of media including websites, digital imaging, audio, and video production. Students will also explore ethical issues surrounding media production and consumption, copyright, and the appropriate use of copyrighted materials. Students will have flexibility in software selection, including a variety of open-source software, to complete required assignments and projects.

Information Technology 120: IT 120 focusses on the tools and strategies used within the realm of information and communications technology (ICT). Students learn how to design and create products using essential skill-based applications (e.g., word processing, desktop publishing, spreadsheets, cloud computing, presentation, and database management), as well as apply formal project management knowledge, principles, and practices. An overview of ICT careers is also presented to students.

Robotics and Automated Technology 120: This course explores the fields of robotics and automation. Using experimentation labs, students will learn and apply various automation concepts such as logic programming and the integration of technologies including pneumatic, electrical, mechanical, and computer. Students will develop valuable technology skills in the areas of design, technical writing and communication, and systematic approaches to problem solving and trouble shooting. Students will construct simulations and models of robot and automation processes using industrial types of equipment and computer simulation software. This course would be an asset to any student who will at some point become involved in processing or manufacturing whether at the entrepreneurial, administration, engineer, technologist, or technician level.

### Occupational Subcluster

Agriculture 110\*:Agriculture 110 includes the history and evolution of Agriculture in New Brunswick which recognizes Indigenous and settler contributions, everyday impacts on life in New Brunswick, and specific types of Agriculture predominant in New Brunswick. Learners will apply knowledge of plants and animals to local contexts, to introductory plant growing and animal care research skills, this leads to creating quality Agriculture products and/or operations. Learners will apply skills during Agriculture experiences and/or work placements and will build knowledge in Agricultural careers. Agriculture 110 allows the opportunity for a learner-led personal choice project or development of a business proposal and plan to summarize and demonstrate learning.

Business and Organization Management 120: This course will allow students to survey all aspects of business and stimulate interest to pursue studies at a post-secondary level as they become aware of career opportunities and the challenges of the entrepreneur in a global setting. This is an introductory course that pertains to business organization, ownership, operation, and management. It will focus on the Canadian Business System and deal with large and small businesses as they function successfully within the system. The course will cover topics such as: management of personnel, sources of funding, labour relations, stock market, establishing the best marketing mix for success, dealing with customers, government and the law, and organizational skills.

Early Childhood Services 110/120: This course will focus on the skills to prepare people to work with children. It is a how to program, applying basic theory to hands-on activities. Child caregivers are important in our society, for they guide and teach today’s children, who become tomorrow’s adults.

Entrepreneurship 110 (FI/FSL): Entrepreneurship is about developing a business. Students in Entrepreneurship 110 will be creating a small acreage farm business here at OHS. This course will focus on students creating ideas, skills and recognizing business opportunities. Students will learn about creating a small business via group work, research, videos, guests, and hands-on experiences that will help build a possible future career. This course is dedicated to student-lead investigation where critical thinking, problem solving, and decision-making skills will be developed in the process of examining and analyzing agriculture issues as a business. This is an excellent course for students who wish to continue the study of business and or agriculture/agribusiness. Students will also be required to complete mandatory oral presentations as part of this curriculum.

Fashion Technology and Design 110/120\*:This course is designed to introduce and prepare students for possible careers in the fashion industry. It deals with the history of the Textile Apparel industry, characteristics and construction of fabrics, careers available and the skills required, plus basic construction and product assembly with the use of technology.

Forestry 110\*:Forests and sustainable forest management have and will continue to play an essential role in the social, environmental, and economic wellbeing of the province. Forestry 110 will develop an appreciation and understanding of the societal values placed on forested ecosystems, how forests are managed to achieve these values, and the interactions between humans and forests. The learning outlined will promote literacy, knowledge, and skills to enable students to meaningfully engage in public discourse around forests and the forest sector. The course will also identify multiple career pathways within the forest sector for rewarding employment within the province of New Brunswick.

Housing and Interior Design 120:Housing and Interior Design 120 is designed to show the relationship between different types of housing and the housing needs of individuals, families, and communities. The influences of cultural, psychological, and aesthetic aspects of housing are examined. The value of creativity and individuality in a living environment is an important element of the course. Course topics span factors including housing in various cultures, historical and modern trends in housing and lifestyles needs, financial and legal costs and requirements, basic floor plans and arrangements, plus the principles and elements of design.

Hospitality & Tourism 110: Students will explore the sectors of the Travel Industry including accommodations, food and beverage, adventure tourism, and transportation. Students will have the opportunity to create and evaluate Hospitality and Tourism through its past and into the future. Students will learn valuable customer service skills and create a dream vacation for themselves through a term project. The skills learned will benefit the students with transferable skills for future employment opportunities. This course will explore areas of travel and tourism opportunities around the globe.

Introduction to Accounting 120: Introduction to Accounting 120 introduces students to skills necessary for general accounting and bookkeeping. The nine-module course, both academic and practical, will emphasize steps of the service industry's accounting cycle, accounting processes from a business event to year-end reporting and the basics of spreadsheets. Students will receive a solid grounding for post-secondary study in business as well as skills for employment and/or personal finance.

Marketing 120:This course introduces students to marketing function and activities that occur within the Canadian marketplace and how it affects us as consumers. Students will also be able to explore and be exposed to potential career opportunities. Areas of focus include the evolution of marketing, the marketing mix, the Canadian Code of Advertising standards, market research, as well as advertising techniques and strategies.

Develop and Lead 110: The vision for this course is to have learners discover, explore, and reflect on leadership. In Develop and Lead 11, learners will have the opportunity to plan, organize, and administer projects within their schools and communities. Regardless of their comfort level or previous experience, learners will develop leadership potential in a safe and inclusive space. Learners will explore various roles in group dynamics, including being a leader, collaborating with others, and contributing positively to learning experiences. When learners take on leadership responsibilities, overall participation increases, and engagement improves. Leadership potential is developed when learners are provided the autonomy to create initiatives which build and reinforce leadership attributes, styles, and skills.

#### Skilled Trades Subcluster[[19]](#footnote-19)

Automotive Electrical Systems 120\*:This course introduces the theory and operation of automotive electrical systems. Students will begin with a study of the basic principles of electricity, which includes electron theory, magnetism, and electrical symbols. They will then progress to the study of individual components throughout the vehicle.

Culinary Technology 110**[[20]](#footnote-20) (FI/FSL)**: Culinary Technology 110 is an entry level hands-on food service training course designed for students who may be considering a career in the food service industry. Culinary skill sets include industry organization, standards, safety, and sanitation, use of tools and equipment, and food preparations. Students will study the theory of each skill and then practice those skills under supervised lab activities. The labs include learning to make cookies, quick breads, pies/pastries, icings/fillings, and baking with yeast. There is also time spent learning to run a small food business.

**Culinary Technology 120[[21]](#footnote-21) (FI/FSL):** Culinary Technology 120 is a continuation of Culinary Technology 110. The grade 12 skill sets include a review of skills learned in grade 11, plus: development of skills and knowledge needed in the food service industry, understand sanitation and safety challenges in food service, and to gain knowledge in standard procedures used in food preparation and service. Students are encouraged to learn through enterprise activities. Labs include influences on North American cuisine, food for meals (legumes, fruits and vegetables, shellfish, meat cuts), menu management, plating, and additional food preparation skills. Additional theory includes the planning of quality meals, ordering, pricing, preparation, and service.

Electrical Wiring 110/120:The overall aim of this course is to cultivate the need and desire of students to follow safe work practices and to develop the language and work skills of the trade by being able to relate electrical blueprints and specifications to a real job; identify the various materials, tools, techniques, and rules governing the installation and connection of electrical components used in residential wiring; explore employment skills and career awareness in electrical and associated trades (linesman, controls, instruments, and industrial electrician); explore potential employment options looking at provincial statistics and industry projections; and, identify the certification and continued education available at colleges and universities as well as an awareness of the Canadian Red Seal Certification Program and its professional designation (RSE).

Framing and Sheathing 110**[[22]](#footnote-22)**: In this course students will be introduced to the process used in house construction. A combination of classroom learning and hands-on experience in the carpentry laboratory will familiarize students with the tools, materials and techniques used in home construction and renovations.

Internal Combustion Engines 110**:** This course is designed to develop proficiency in the repair, overhaul, service, and testing of the internal combustion engine. The theory of operation of the engine and its components is emphasized, along with the development of manipulative skills and work habits. This course develops the interdisciplinary skills of observation, reflection, documentation, purposeful/intentional planning, goalsetting, decision-making, and problem-solving. This course will also incorporate using a hands-on approach of both project-based and experiential learning.

Introduction to Applied Technology 110**[[23]](#footnote-23) (FI/FSL)**: This course introduces students to a variety of careers in trades, providing opportunities to explore and research practices and skills required for employment in trades/technology sectors. Problem identification, teamwork and leadership skills are reinforced. Student creativity and life skill development in the design, construction, repair and maintenance modules reinforce situations that are found in industry.

Metals Fabrication/Welding 110 (FI/FLS)/120**:** Metals Fabrication 110 introduces students to applications of math, drafting and manufacturing processes. Students develop the dexterity required to safely operate hand tools & stationary equipment. Throughout the course, students are presented with problems that require literacy/math/science skills, and challenge logic comprehension to build and manufacture products/components for almost unlimited applications. Metal Fabrication / Welding 120 introduces students to advanced skills and practices, building upon the theory and practical skills obtained in Metal Fabrication / Welding 110. This advanced course encapsulates and reinforces theory in Math, SMAW, GMAW, PAW, OFC, all of which lead to a capstone project. Students will learn valuable safety procedures, tool skills, and engage with the NB global competencies.

Metals Processing 110/120 (FI/FSL)**:** Metal Processing 110 and 120 allows students to learn basic and to then move on to advance basic skills. Students will practice and develop introductory skills that are required to pursue post-secondary learning in the Metals trades. Students enrolled in this course are encouraged to work both independently and in teams while achieving specific curriculum outcomes.

Mill and Cabinet Work 120**[[24]](#footnote-24)**: Students in this course build a series of wooden products to learn the safe operation of woodworking tools and equipment. They also learn project planning and estimating as well as finishing and installation of cabinets and furniture. This course will be of interest to students exploring career opportunities in the building construction industry as well as those with a general interest in woodworking.

Power Train and Chassis 110**:** Powertrain and Chassis 110 is designed to develop proficiency in the repair, overhaul, service, and testing of the automobile chassis and power train. Emphasis is placed on the function, repair and replacement of components and includes spring and shock assemblies, brakes, steering, wheel bearings, tires, transmissions, differentials, and drive lines.

Residential Finish 120**[[25]](#footnote-25)**: This course is designed to provide the instruction and practical experience necessary for the completion of the exterior and interior of houses. Included in this course are the use of tools and techniques required to install roofing, siding (vinyl and wood), exterior trim, doors, windows, insulation, drywall, and interior trim. This course would appeal to students interested in carpentry. Good attendance is mandatory in this course.

Tune-up and Emissions 120**:** Tune-up and Emissions 120 designed to provide students with a practical approach to diagnosing, servicing, and repairing of automotive fuel and emission systems and to performing engine and accessory systems maintenance.

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# Pathway Examples

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| --- | --- | --- | --- |
| Pathways to Graduation for **English Prime** Students | | | |
| **Grade 9 (no Credits)** | **Grade 10** | **Grade 11** | **Grade 12** |
| ELA 9 | At least 1 course from: ELA 10 Compulsory List | At least 1 course from: ELA 11- Compulsory List | ELA 12 |
| Mathematics 9 | Geometry Measurement and Finance 10 | Mathematics Option | Mathematics Option |
| Social Studies 9 | Civics 10 | Course Choice | Humanities Option Course Choice |
| Science 9 | Science Option | Science Option | Course Choice |
| Music 9 | Course Choice | Creative Arts Option | Course Choice |
| Art 9 |
| Physical Education 9 | Wellness and Physical Education Option | Course Choice | Course Choice |
| Personal Wellness 9 | Career-Connected Option | Personalized Well-Being Option | Personalized Well-Being Option Course Choice |
| Technology 9 |
| PIF 9 | Language Arts and Languages: PIF 10 | Core Cluster Option | Core Cluster Option |
|  | Language Arts and Languages Option | Language Arts and Languages Option | Course Choice |
|  | Course Choice | Course Choice | Course Choice |
| Note: Students may enroll in any course provided they meet the pre or co-requisite, regardless of grade level.   * Career-life plans in myBlueprint are recommended to be developed in Grade 9 and reviewed/updated on a yearly basis. | | | |

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| --- | --- | --- | --- |
| Pathways to Graduation for **Essential Skills Achievement Pathway – Workplace Entry** | | | |
| **Grade 9 (no Credits)** | **Grade 10** | **Grade 11** | **Grade 12** |
| ELA 9 | At least 1 course from: ELA 10 Compulsory List | At least 1 course from: ELA 11- Compulsory List | ELA 12 |
| FI Mathematics 9 | Geometry Measurement and Finance 10 | Culinary Technology 110 | Culinary Technology 110 (Co-op placement) |
| FI Social Studies 9 | Civics 10 | Culinary Technology 120 | Culinary Technology 120 (Co-op placement |
| FI Science 9 | PIF 10 | Finance and Workplace Math 110 | NBCC Math 1208 Dual Credit Skilled Trades Math 120 |
| Music 9 | Physical Education 10 | Hospitality and Tourism 110 |
| FI Art 9 | Human Services 110 |
| FI Physical Education 9 | Applied Technology 11 | Outdoor Pursuits/Education 110 | Essential Skills Achievement Pathway – Workplace Entry 400 Hour Work Placement |
| Personal Wellness 9 | Introductory Mi’Kmaw 110 | Essential Skills Achievement Pathway – Foundational Learning |
| Technology 9 |
| FILA 9 | Career Pathway Design 10 |
|  | Essential Skills Achievement Pathway – Foundational Learning | Essential Skills Achievement Pathway – Workplace Entry – Workplace Readiness |
|  |
| Note: Students may enroll in any course provided they meet the pre or co-requisite, regardless of grade level.   * Career-life plans in myBlueprint are recommended to be developed in Grade 9 and reviewed/updated on a yearly basis. | | | |

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| --- | --- | --- | --- |
| Pathways to Graduation for **Essential Skills Achievement Pathway – Post Secondary Education** | | | |
| **Grade 9 (no Credits)** | **Grade 10** | **Grade 11** | **Grade 12** |
| ELA 9 | At least 1 course from: ELA 10 Compulsory List | At least 1 course from: ELA 11- Compulsory List | ELA 12 |
| FI Mathematics 9 | Geometry Measurement and Finance 10 | Framing and Sheathing 110 | Environmental Science 120 |
| FI Social Studies 9 | Civics 10 | Mill and Cabinet 120 | Entrepreneurship 110 |
| FI Science 9 | Applied Technology 11 | Foundations Math 12 | Co-op 120 |
| Music 9 | Physical Education 10 | Canadian Geography 120 |
| FI Art 9 |
| FI Physical Education 9 | Science 10 | Computer Aided Design 110 |
| Personal Wellness 9 | Numbers Relations and Functions 10 | Essential Skills Achievement Pathway – Foundational Learning | Essential Skills Achievement Pathway – Post Secondary Learning – Forest Technology |
| Technology 9 |
| FILA 9 | PIF 10 |
|  | Essential Skills Achievement Pathway – Foundational Learning | Essential Skills Achievement Pathway – Post Secondary Learning – Forest Technology | Essential Skills Achievement Pathway – Capstone Project |
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| Note: Students may enroll in any course provided they meet the pre or co-requisite, regardless of grade level.   * Career-life plans in myBlueprint are recommended to be developed in Grade 9 and reviewed/updated on a yearly basis. | | | |

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| --- | --- | --- | --- |
| Pathways to Graduation for **French Immersion** Students | | | |
| **Grade 9 (no Credits)** | **Grade 10** | **Grade 11** | **Grade 12** |
| ELA 9 | At least 1 course from: ELA 10 Compulsory List | At least 1 course from: ELA 11- Compulsory List | ELA 12 |
| FI Mathematics 9 | FI Geometry Measurement and Finance 10 | Mathematics Option | Mathematics Option |
| FI Social Studies 9 | FI Civics 10 | Course Choice | FI Humanities Option Course Choice |
| FI Science 9 | Science Option | Science Option | Course Choice |
| Music 9 | Option Course Choice | Creative Arts Option | Course Choice |
| FI Art 9 |
| FI Physical Education 9 | FI Wellness and Physical Education Option | FI Course Choice | Course Choice |
| Personal Wellness 9 | Career-Connected Option | Personalized Well-Being Option | Personalized Well-Being Option Course Choice |
| Technology 9 |
| FILA 9 | Language Arts and Languages: FILA 10 | Language Arts and Languages Option: FILA 11 | Language Arts and Languages: FILA 12 |
|  | Course Choice | FI Core Cluster Option | FI Core Cluster Option |
|  | Course Choice | Course Choice | Course Choice |
| Note: Students may enroll in any course provided they meet the pre or co-requisite, regardless of grade level.   * Career-life plans in myBlueprint are recommended to be developed in Grade 9 and reviewed/updated on a yearly basis. | | | |

# Graduation Requirements Checklist – 2024 and 2025

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course | | Course Name |  | Grade (%) |
| ELA 10 – Literary Text | | -- |  |  |
| ELA 10 – Informational Text | | -- |  |  |
| ELA 11 – Literary Text | | -- |  |  |
| ELA 11 – Informational Text | | -- |  |  |
| ELA 12 | | -- |  |  |
| OR | PIF 10 |  |  |  |
| FILA 10 |
| Social Studies 10 | | -- |  |  |
| Science 10 | | -- |  |  |
| Geometry, Measure and Finance 10 | | -- |  |  |
| Art 10 | | -- |  |  |
| Music 10 | | -- |  |  |
| BBT 10 | | -- |  |  |
| PDCP 10 | | -- |  |  |
| At least 2 of the following: | Numbers, Relations, and Functions 10 | -- |  |  |
| Financial Workplace Math 11 | -- |  |  |
| Foundations 11 | -- |  |  |
| Financial Workplace Math 12 | -- |  |  |
| NBCC Math 120 Dual Credit | -- |  |  |
| Science (From grade 11 or 12) | |  |  |  |
| Humanities | |  |  |  |
| Fine Arts/Life Role | |  |  |  |
| Elective | |  |  |  |
| Elective | |  |  |  |
| Elective | |  |  |  |
| Elective | |  |  |  |
| Elective | |  |  |  |
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| Elective | |  |  |  |
| Elective | |  |  |  |
| Elective | |  |  |  |
| ELPA | |  |  |  |

\*Five credits must be grade 12, including ELA 12.

\*18 Credits of 20 attempted are required to graduate. 60% is a pass.

# Graduation Requirements Checklist - 2026

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses/Clusters | | | Course Name |  | Grade (%) |
| Language Arts (24 credit hours) | | | | | |
| ELA 10 | | | -- |  |  |
| ELA 11 | | | -- |  |  |
| ELA 12 | | | -- |  |  |
| Choice | | |  |  |  |
| Choice | | |  |  |  |
| OR | PIF 10 | |  |  |  |
| FILA 10 | |
| Humanities (8 Credit hours) | | | | | |
| Civics 10 | | | -- |  |  |
| Choice | | |  |  |  |
| Science (8 Credit hours) | | | | | |
| Choice | | |  |  |  |
| Choice | | |  |  |  |
| Math (12 Credit hours) | | | | | |
| Geometry, Measure and Finance 10 | | | -- |  |  |
| At least 2 of the following: | Numbers, Relations, and Functions 10 | | -- |  |  |
| Financial Workplace Math 11 | | -- |  |  |
| Foundations 11 | | -- |  |  |
| Financial Workplace Math 12 | | -- |  |  |
| NBCC Math 120 Dual Credit | | -- |  |  |
| Personalized Well-Being (20 Credit Hours) | | | | | |
| Creative Arts Subcluster Choice | | |  |  |  |
| Wellness & Phys. Ed Subcluster Choice | | |  |  |  |
| Career-Connected Learning Subcluster Choice | | |  |  |  |
| Any 2 more from the Personalized Well-Being Cluster | | Choice |  |  |  |
| Choice |  |  |  |
| Choice (28 credit hours) | | | | | |
| 2 choices from any cluster | | Choice |  |  |  |
| Choice |  |  |  |
| Choice/Flexible Options for Credit | | |  |  |  |
| Choice/Flexible Options for Credit | | |  |  |  |
| Choice/Flexible Options for Credit | | |  |  |  |
| Choice/Flexible Options for Credit | | |  |  |  |
| Choice/Flexible Options for Credit | | |  |  |  |
| ELPA | | |  |  |  |

\*100 Credit hours are required to apply to graduate.

\*60% is a pass.

1. A variety of courses are now considered eligible as the required humanities credit beginning September 2023. [↑](#footnote-ref-1)
2. Always subject to revisions and cancellation if enrollment numbers do not warrant offering the course. [↑](#footnote-ref-2)
3. Credit-hours refers to the currency used in most prescribed courses where the standard is 4 credit-hours/semester course (crh) unless otherwise stated and/or approved [↑](#footnote-ref-3)
4. See [Early Application to Graduate Process](#_Early_Application_to_1) on page 3 for details. [↑](#footnote-ref-4)
5. A student may be exempted if they are learning English as an additional language at A1-A2 levels in reading/writing. Students at B1 level and above should attempt the ELPA with universal accommodations. [↑](#footnote-ref-5)
6. Essential Skills Achievement Pathways and Dual Credit courses may be approved as replacements for courses in Subject Area Clusters. [↑](#footnote-ref-6)
7. The 6 high school EAL courses (Essentials, Connections and Expressions) are part of this cluster. [↑](#footnote-ref-7)
8. Mi’kmaq/Wolastoqey may replace French as the language requirement for Indigenous Students. Newcomers in high school with English language levels of A1-B1 on the CEFR may take EAL classes in place of Post-Intensive French 10. [↑](#footnote-ref-8)
9. Not all courses are offered at JCS. Every effort is made to offer a variety of courses based of staffing [↑](#footnote-ref-9)
10. Courses with an asterisk may only be used to meet a single cluster’s requirement. [↑](#footnote-ref-10)
11. *Advanced Placement/International Baccalaureate Courses* – Not offered at JCS, usually available in some urban schools. [↑](#footnote-ref-11)
12. Can also be considered for the Occupational subcluster of the Personalized Well-Being cluster. [↑](#footnote-ref-12)
13. UNB may require students entering Science, Engineering, and Forestry to have credits in Physics 11 and 12. NB Community College may require credits in Physics 11 and 12 for entrance to some technology courses. [↑](#footnote-ref-13)
14. Please note that this course requires additional supplies and/or payment of lab, studio, or other fees, therefore a $25 fee applies. [↑](#footnote-ref-14)
15. Can also be considered in the Occupational subcluster of the Personalized Well-Being cluster. [↑](#footnote-ref-15)
16. Please note that this course requires additional supplies and/or payment of lab, studio, or other fees, therefore a $25 fee applies. [↑](#footnote-ref-16)
17. Please note that this course requires additional supplies and/or payment of lab, studio, or other fees, therefore a $25 fee applies. [↑](#footnote-ref-17)
18. No courses from this subcluster are currently offered at JCS. [↑](#footnote-ref-18)
19. Students who achieve a mark of greater than 70% in a skilled trades course will be credited with 80 hours towards their trade certification up to a total of 720 hours over their high school career [↑](#footnote-ref-19)
20. Please note that this course require additional supplies and/or payment of lab, studio, or other fees, therefore a $25 fee applies [↑](#footnote-ref-20)
21. See note 16. [↑](#footnote-ref-21)
22. Please note that this course requires additional supplies and/or payment of lab, studio, or other fees, therefore a $25 fee applies [↑](#footnote-ref-22)
23. See note 18 [↑](#footnote-ref-23)
24. See note 18 [↑](#footnote-ref-24)
25. See note 18 [↑](#footnote-ref-25)