



Course Selection

2022/2023

Table of Contents

Contents

Table of Contents	2
Principal/Vice Principal Message	3
Timberline Services & Programs	4
Timberline Electives	5
Timberline Courses at a Glance	6
BC 2018 Graduation Program	7
My Credits for Graduation	8
Timberline Course Selection	9
English	9
Mathematics	12
Science	17
Social Studies	20
Home Economics/Foods	22
Languages	24
Physical Education	25
Technology Education	27
Digital Hackerspace	30
Digital Media	32
Business Education	33
Performing Arts	34
Visual Arts	35
Human Services	36
Outdoor Adventures Program 11/12	38
Career Life Education/Connections and Capstone	39
Post Secondary & Dual Credit Options	40
District Programs	44

Principal/Vice Principal Message

Welcome to the 2022-23 school year! We know that the past year has seen many changes to how we go to school at Timberline. What hasn't changed is that our course booklet is the first step towards a fulfilling and exciting year of school at Timberline next year, whatever the pandemic may bring us. Our staff spend many hours preparing courses and organizing this booklet so that students have as much a range of course choices as possible. Students please take the time to read through the booklet and share the information with your families. The courses you choose will help us offer opportunities at the school, as well as provide each of you with as exciting and diverse an experience at Timberline as possible.

We urge you to extend your learning by trying to find an opportunity to enrol in a class, or subject area that you have not tried before. Often it is in these types of situations that students find a passion for something that leads to a life-changing career path!

Mr. Laird Ruehlen and Ms. Christine Middleton

Principal and Vice-Principal



Timberline Services & Programs

Counselling

The counselling office at Timberline provides a variety of counselling services to our students. These include, but are not limited to, course selections assistance, post-secondary planning and personal counselling. Students are assigned a counsellor by their last name, but are able to choose a counsellor of their preference. Appointments can be made to see a counsellor in the school's student service office.

Career Development

Timberline's Career Facilitators can be found in the student service office. The Career Facilitators have many roles that include, but are not limited to: Work Experience, Co-op Ed, dual credit options with North Island College, Career and Life Education, and the Capstone Project.

First Nation Youth Worker and Support Teacher

Timberline's First Nations students are welcome and encouraged to connect with our First Nations Youth Worker and Support Teacher. The Support worker can be found in our First Nations room, while the Support Teacher can be found in the student services office.

Learning Commons

The Library Learning Commons is a learning hub for the school community that encourages teachers and students to collaborate, communicate, and share. It is a flexible space that meets a variety of needs for students, classes, clubs, and community events, supporting inquiry, creativity, and connection. Students are always welcome in the learning commons, before, after, and during school hours where Mrs. Murphy is happy to provide any support she can offer.

Flex Wednesday

Timberline students participate in a Flex Wednesday Schedule. Every Wednesday A,B,C and D block take place in the morning. The afternoon is separated into Flex 1 and Flex 2 blocks. During this time students sign up for a variety of different academic, special interest, or career activities. Students sign up on Monday and participate on the Wednesday. Flex is a great way to experience a new activity or to get the extra help you need to have success in your regular classes. Each year students who attend Flex Wednesday are given 2 credits towards graduation.

Student Support

Student support is designed for students who may need extra time and support with their academic courses. Students needing support will consult with the learning support teachers and counsellors to determine the best form of support for their academic needs.

Timberline Electives

Timberline students can take a variety of electives over their four years at the school. As students progress through each grade more elective options become available. Students are encouraged to take a variety of electives in grade 9 and 10 to assist them in choosing an area of interest once they are in grade 11 and 12. Below is an overview of the electives. Specific courses and descriptions can be found in the course booklet.

Applied Design, Skills & Technologies

- Business Education
- Home Economics
- Technology Education
- Digital Hackerspace
- Digital Media
- Dual Credit Trades

Fine Arts

- Drama
- Music
- Visual Arts
- Media Arts

Physical Education

- Co-Ed PE
- Body Zen
- Hockey
- Fitness
- Basketball
- Volleyball
- Fields

Human Services

- Psychology
- Child Psychology
- Leadership

Out of Timetable Electives

- Leadership
- Sports Leadership
- Jazz Band
- Stage Craft
- Musical Theater

External Credits

Many activities that students are involved in outside of school qualify for high school credits. Please check with your counsellor to determine if you are eligible.

Timberline Courses at a Glance

Required Courses			
Grade 9	Grade 10	Grade 11	Grade 12
English 9 Math 9 Science 9 Social Studies 9 Any PE 9 Career Life Education 1	English 10 Any Math 10 Science 10 Social Studies 10 Any PE 10 Career Life Education 10	English 11 Any Math 11 Any Social Studies 11/12 Any Science 11 Career Life Connections 1	English 12 3 Grade 12 Electives Career Life Connections 2 Capstone Project
Electives			
Grade 9	Grade 10	Grade 11	Grade 12
Amazing Trades Art and Drama Band C.S.I.: Collaborative Studies and Investigation Food and Pottery French Spanish 1 Sports Leadership Leadership Musical Theater Stage Craft	Acting Musical Theatre Stage Craft TSN Digital Media Broadcasting Video Productions Digital Photography Concert Band Jazz Band Art Studio Drawing and Painting Ceramics and Sculpture Entrepreneurship Foods 1 Drafting and Design Electronics/Robotics Mechanics Jewellery and Art Metal Woodwork Skills Exploration Skateboard Construction Sports Leadership Leadership Computer Modelling Digital Art Game Design Web Development French Spanish	All grade 11/12 PE Courses Acting Musical Theater TSN Digital Media Broadcasting Media Arts Jazz Band Concert Band Art Studio Drawing and Painting Graphic Art Ceramics and Sculpture Entrepreneurship Accounting Foods 2 Drafting and Design Electronics/Robotics Mechanics Jewellery and Art Metal Carpentry and Joinery Trade Sampler NIC Skills Exploration Skateboard Construction Leadership Computer Programming 3D Computer Modelling and Animation Game Design Digital Art Digital Hack Lab Stream to Sea At Issue Psychology 11 and 12 Child Psychology 11 and 12 French Spanish	All grade 11/12 PE Courses Most grade 11 electives at the grade 12 level Outdoor Adventures Program At Issue Biology 12 Alternate Assessment The Human Experience NIC Dual Credit

BC Graduation Program

The B.C. Certificate of graduation, or Dogwood Diploma, is awarded to students who successfully complete the provincial graduation requirements. To graduate, students require at least 80 credits total. These credits are accumulated through required courses, electives, and career education.

Required Courses	
English 10	
English 11	
English 12	
Social Studies 10	
A Social Studies 11 or 12	
Science 10	
A Science 11 or 12	
A Mathematics 10	
A Mathematics 11 or 12	
Physical Education 10	
A Fine Arts/Applied Skills 10, 11, 12	
Total Required Credits:	44
Elective Credits	
<i>Students must earn a minimum 28 elective credits:</i>	
<ul style="list-style-type: none"> • Grade 10, 11, or 12 Ministry-Developed or Ministry-Approved courses • Board Authorized Courses • Independent Directed Studies • External Credits • Post Secondary (Dual Credits) 	
Total Elective Credits:	28
Career Education	
Career Life Education 10, Career Connections and Capstone Project (30 hours of work or volunteer experience)	8
Overall Total:	80

My Credits for Graduation

This page can be used to keep track of your graduation credits. Use the requirements on the previous page to assist you.

Grade 10		Grade 11		Grade 12	
English 10		English 11		English 12	
Social Studies 10		Social Studies 11 or 12		.....12	
Science 10		Science 11		.....12	
Math 10		Math 11		.....12	
P.E. 10		.....		.....
Career Life Education 10		.....		.....
.....10		.....		.....
.....10		.....		.....
		.....		Career Life Connection	
				Capstone Project	
Grade 10 Total:		Grade 11 Total:		Grade 12 Total:	
Total Credits over Grade 10, 11, and 12					
Minimum Total of 80 Credits					

- **One Course in Fine Arts or Applied Skills**
- **4 Courses at the Grade 12 level**
- **Completion of all components for Career Education**
- **Completion of the Numeracy and Literacy Assessments**

Timberline Course Selection

English

English 10

Listening, speaking, reading, analyzing and writing skills are important to prepare you for life! English 10 provides students with opportunities to develop all of these effective communication skills and more! Students develop an appreciation of language and literature, old and new, and they extend their creative and critical thinking skills through expository, persuasive and narrative writing forms.

Combined Social Studies 10 and English 10

"History will be kind to me for I intend to write it." With its focus on historical and contemporary social, cultural, political, legal, economic, and environmental issues, this literary study will prepare students for their future lives as Global citizens and members of the International community. This course will combine Social Studies 10 and English 10, along with the opportunity to engage in an independent directed study based off of the course curriculum. The Social Studies 10 portion of the course will cover a vast amount of information, and the skills students will learn through English 10 will not only prepare them for the Provincial Assessment, but also how to analyze information, concisely convey ideas, and communicate effectively.

English 11

"Writing is exploration...I'm surprised where the journey takes me." English 11 is an academic course in which students will be expected to develop their oral, written and critical thinking skills. On the journey, students will explore a variety of reading and media material, develop their appreciation of literature and express their understanding of ongoing issues

First Peoples English 11

First Peoples English 11 is the academic equivalent of English Language Arts 11 and is open to all students who have passed English 10. This course will enable students to develop the English language and literacy skills and capacities to meet graduation requirements, while focusing on First Nations perspectives, authors and principles of learning. In this course, students will study texts that present authentic First Peoples voices and important themes such as, connection with the land and environment, the nature and place of spirituality, the nature of knowledge — who holds it, what knowledge is valued, the role of Elders, the importance of a living oral language tradition, the experience of colonization and decolonization, loss and grieving, freedom and hope, and humour and its role in First Peoples cultures.

English 12

“Have something to say, and say it as clearly as you can.” English 12 is the culmination of the regular English program. Students are expected to continue to develop their knowledge and skills. Students can expect to read worthwhile materials and improve their language proficiency as they develop their skills through a variety of written and visual responses.

Combined English 11 or 12/History 12, Independent Study 11 or 12 (12 credits)

"We are not makers of history. We are made by history." With its focus on historical and contemporary social, cultural, political, legal, economic, and environmental issues, this literary study will prepare students for their future lives as Global citizens and members of the International community. This course will combine History 12 and English 12, along with the opportunity to engage in an independent directed study based off of the course curriculum. The History 12 portion of the course will cover a vast amount of information, and the skills students will learn through English 12 will not only prepare them for the Provincial Assessment, but also how to analyze information, concisely convey ideas, and communicate effectively.

First Peoples English 12

First Peoples English 12 is the academic equivalent of English Language Arts 12 and is open to all students who have passed English 11. This course will enable students to develop the English language and literacy skills and capacities to meet graduation requirements, while focusing on First Nations perspectives, authors and principles of learning. In this course, students will study texts that present authentic First Peoples voices and important themes such as, connection with the land and environment, the nature and place of spirituality, the nature of knowledge — who holds it, what knowledge is valued, the role of Elders, the importance of a living oral language tradition, the experience of colonization and decolonization, loss and grieving, freedom and hope, and humour and its role in First Peoples cultures. While the focus of this course is primarily on First Peoples voices from British Columbia, it will also offer students an opportunity to study texts that reflect First Peoples perspectives from elsewhere in Canada and throughout the world.

Literature 12

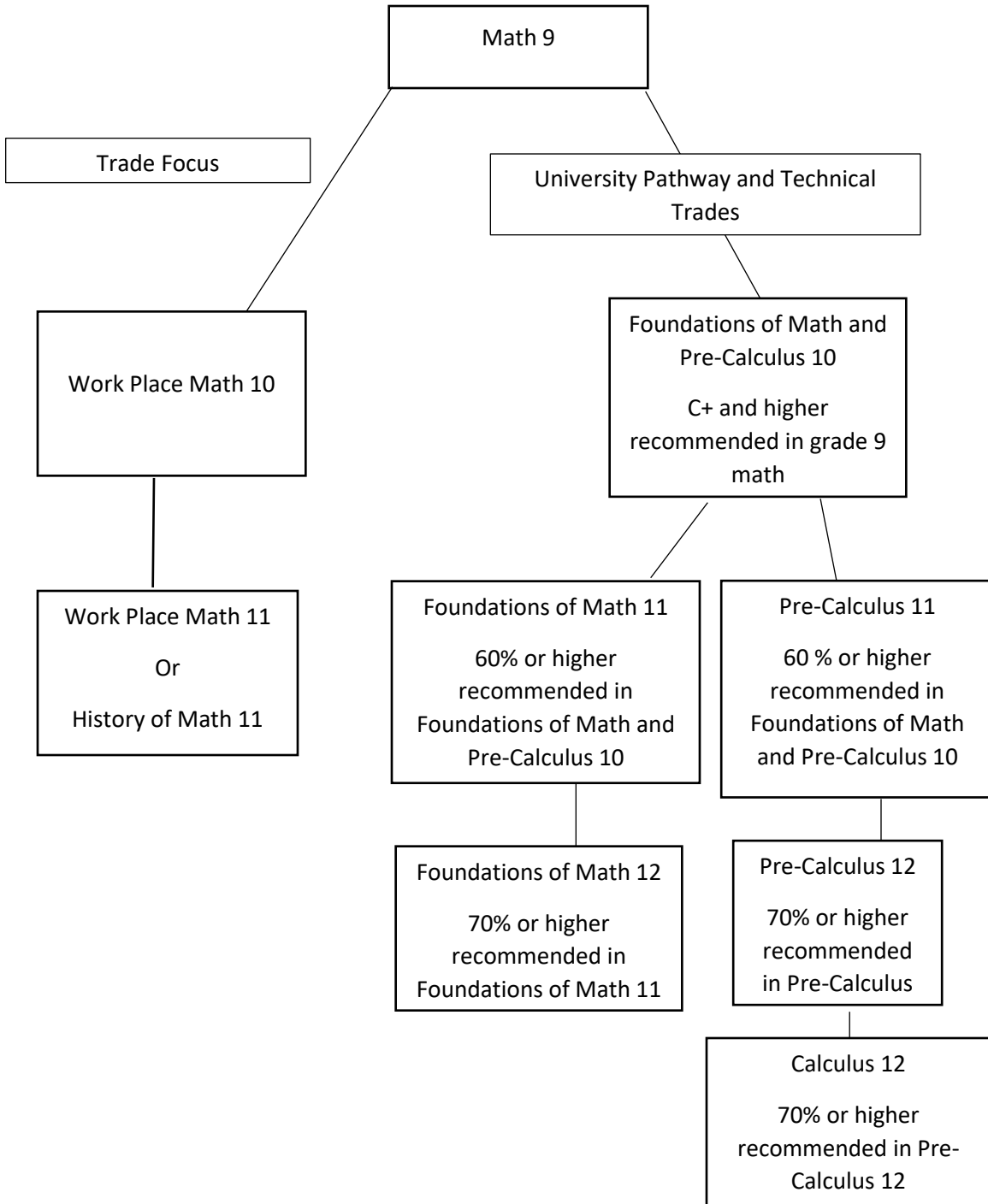
Lit 12 is a historic review of English Literature designed for students interested in pursuing further studies of the English language. It will interest those who enjoy reading for pleasure, analysis and intent.

Writing 10/11/12

Writing 10-12 will be the best and the worst course you will ever take! It's the best course because you do not have to study or write tests or exams. You do not have to memorize muscles, bones, formulas, or dates. It will be the most difficult course you will ever take because – guess what? – you write it. This course does not exist without you! You are doing what few dare to do and that is to say what you feel. Writing 10-12 is simple. Use the best words in the best order to say what you mean. In this course we will be practicing different types of writing including exposition, persuasion, description, dialogue and narration. You will be producing poems, stories, memoirs, blogs, and more!

Mathematics

There are different pathways for students in math at high school. It is important that you choose the pathway that is appropriate for you. All students will need to write the provincial numeracy assessment in their grade 10. Below are the pathways that can be taken in math.



Workplace Mathematics 10

This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for entry into the majority of trades and for direct entry into the work force. Topics include algebra, geometry, measurement, number, statistics and probability. Successful completion of Apprenticeship and Workplace Mathematics 10 will lead into Workplace Mathematics 11 and Apprenticeship and Workplace Mathematics 12 only.

Foundations of Mathematics and Pre-Calculus 10 Prep

This course is designed as a prerequisite to Foundations and Pre-Calculus Mathematics 10. The semester will focus on skill-building and making connections to better enable students to find success in a curriculum-heavy, fast-paced Mathematics 10 classroom. Students enrolled in this course are required to follow-up with either Foundations and Pre-Calculus Math 10 or Apprenticeship and Workplace Math 10 in their next semester. Topics include: study skills, formula and equation manipulation, basic algebra, geometry and financial planning.

Foundations of Mathematics and Pre-Calculus 10

This course is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies. The grade 10 year will set a basis for deciding whether to pursue exclusively the theoretical Pre-Calculus stream or the more applied Foundations stream. Students who are thinking of entering a mathematically dependent field (Mathematics, Computer Studies, Engineering, Sciences, etc.) may want to choose both streams in grade 11. Topics include: measurement, coordinate geometry, algebra and trigonometry.

Mathletes 10 (Yearlong Foundations and Pre-Calc 10 and PE 10)

Do you want to have PE all year long? Do you want to up your game in math? Then Mathletes 10 is the course for you! We all know the physical benefits of activity but through current brain research it has been shown that there are astounding learning and mental health benefits as well. Getting your heart rate into a moderate zone for 20-30 minutes can greatly improve our ability to learn directly after the activity and throughout the day. Physical activity is like miracle grow for your brain! Something you will want to have a dose of all-year long. Some blocks will be all PE, some all Math and some will be a split of PE and Math. Other advantages this course offers are increased time to learn mathematical concepts and decreased length of time off between Math 10 and Math 11. If you are keen to participate fully in both of these courses sign up now!

Mathematics 11

Timberline offers four math courses at the grade eleven level. Please note that they do not represent “easier” or “harder” options. If students are unsure of their plans, they may take as many math 11 courses as they want (in the same way that students have the option of taking courses in more than one field of science).

Note: While any of the following courses satisfies Ministry of Education graduation requirements, it may not be sufficient for entry into specific post-secondary programs. Please check with your individual institutions for details.

Note: Students intending to write the SAT or attend post-secondary outside of BC should be taking both Foundations of Math 11/12 and Pre-Calculus 11/12. Taken alone, neither of these two pathways covers the required material.

HISTORY OF MATH 11

Prerequisite: FMP10 or WM10

This isn't your regular math class! Rather than focusing on developing specific mathematical skills, students will explore the history and development of our current understanding of number systems, algebra, geometry, probability, and statistics. Additionally, we explore the development of computational technology from clay tablets to supercomputers and look at the importance of cryptography as an historical application of mathematics.

Workplace Mathematics 11

This course is strongly recommended for students who are planning on entering the workforce directly after high school, or who are planning on pursuing a career in the trades industries. Topics covered may include reasoning, rates of change, measurement, and statistics. Students who successfully master the learning outcomes of this course may continue on to Apprenticeship and Workplace Mathematics 12.

Foundations of Mathematics and Pre-Calculus 11 Prep

This course is designed as a prerequisite to Foundations or Pre-Calculus Mathematics 11. The semester will focus on skill-building and making connections to better enable students to find success in a curriculum-heavy, fast-paced Mathematics 11 classroom. Students enrolled in this course are required to follow-up with either Foundations of Mathematics 11, Pre-Calculus 11 or Workplace Math 11 in their next semester.

Foundations of Mathematics 11

This course is strongly recommended for students who are planning on pursuing post-secondary studies in the arts or the humanities. Topics studied may include logic and reasoning, functions, geometry, and statistics. Students who successfully master the learning outcomes of this course may continue on to Foundations of Mathematics 12. Students who are planning on pursuing post-secondary studies in math or sciences should take Pre-calculus 11.

Pre-Calculus 11

This course is strongly recommended for students who are planning on pursuing post-secondary studies in math or sciences. Topics covered may include relations and functions, trigonometry, polynomial functions, and graphing. Students who successfully master the learning outcomes of this course may continue on to Pre-calculus 12. Students who are planning on pursuing post-secondary studies in the arts or the humanities should take Foundations of Mathematics 11. Students with less than 60% should consult with their teacher before choosing this course.

Pre-Calculus 11B

Do you LOVE math so much you just can't wait to take another course? Maybe not. But, do you want to feel more PREPARED for Pre-Calculus 12? Then look no further! Introducing Pre-Calculus 11b! This course builds on Pre-Calculus 11 and will deepen your understanding and proficiency with concepts BEFORE you find yourself facing the challenges of Pre-calculus 12 and Calculus 12. Explore exponential and radical graphs. Review linear relations and the application of functions. Investigate rationales and algebra. Get familiar with the wacky world of trigonometry and become wizards on those graphing calculators. Pre-Calculus 11b will help you to feel ready and be more successful for all your future math endeavours.

Foundations of Mathematics 12

This course involves the study of puzzles, compound interest and investment portfolios, set theory, probability, polynomial exponential logarithmic, sinusoidal functions, and current events in math. This is a course for students who do not need to study Calculus in a post-secondary institution.

Pre-Calculus 12

This course includes the following topics: combinatorics, binomial expansion, composite functions, transformations of graphs, exponential and logarithmic functions, polynomial factoring, radical and rational functions, trigonometry, equations and identities. This is a course for students who will study Calculus, Science, and engineering in a post-secondary institution.

Calculus 12

Calculus 12 is an optional course offered to those students who are concurrently taking Mathematics 12. This is a course for students going on to university or college so that they will be able to “continue on” with the mathematics required in many programs rather than having to take a “catch up” course to begin their studies. Calculus studies the mathematics involving “rate of change” how one variable changes in relationship to another. The major topics covered are: limits, differentiation, functions and their graphs, extreme value functions, trigonometric functions, logarithmic and exponential functions, integration, and applications of differentiation.

Apprenticeship Mathematics 12

This course is designed to provide students with the mathematical understandings and critical thinking skills needed for entry into most trades and for direct entry into the work force. The core curriculum consists of measurement (metric and imperial), geometry (similarity of triangles and 3D shapes), logical reasoning, workplace mathematics, as well as financial literacy (investments and loans). It will continue to focus on the mathematical processes learned in previous math courses as well as to foster new math skills.

Artificial Intelligence 12

This course involves a combination of math concepts and computer programming skills to create your own neural network, then apply machine learning algorithms to teach it new things. Major topics include linear and matrix algebra, linear and logistic regression, decision trees, activation functions, backpropagation, gradient descent, and loss functions. Students with no prior computer programming are welcome but they should have a strong math background and enjoy playing with numbers.

Science

Science 10

Science 10 gives an overview of the four branches of science. In Biology will learn all about genetics, why you have the traits that you do, and about mutations, in Chemistry we will learn about compounds, acids/bases relationships, and different types of chemical reactions, in Physics we will learn about all sort of forms of energy and how they can be transformed, and finally we will learn about Astronomy and the Big Bang.

Life Science 11(Formerly Biology 11)

Explore the amazing diversity of all living things. We will learn about the biggest, fastest, oldest, and oddest organisms, including the trillion or so which live in and on you right now! Biology 11 will require you to do many labs including dissections where we discover the complexity of life, and how living things are inter-related.

Stream to Sea 11

Which animals link our streams, forests and oceans together? Is there a way I can do a majority of my learning outside doing hands on activities? What does it take to be a marine biologist? I wonder if I could get some practical work experience and certification that might help me get a job that I really love? All these questions are answered in the new biology course at Timberline called Stream to Sea 11. It is a dual credit course so you not only get a Life Science 11 credit (Biology 11), but also an elective credit. How great is that? It will be 2 blocks(for 8 credits) in a row which means more time to dig deeper (literally) into subjects that hit close to home and field trips. We'll study 3 main units: Forests, Streams, and Marine biology. You'll investigate the different plants and animals found in each area; learn about different research and job prospects in each field, and you can even try it all out for yourself. Who knows, you might find its stuff you really love to do and something to pursue for your career! It is an academically rigorous course but you also need to be excited about being outside. We're looking for positive, enthusiastic learners who are interested in exploring possible futures in biology or just curious about life in our backyards and want to have fun. You need to be ready to work hard inside and outside the classroom. There will be some costs associated with some of the field trips. You can be involved in fundraising throughout the semester to cover any expenses toward the bigger trips and adventures. Space is limited so apply now so you don't miss your chance to have a really unique experience!

Chemistry 11

What a difference an electron makes! You will come to appreciate the truth of this statement as we investigate a wide variety of topics that lay down a broad foundation for future studies in Chemistry. You will be amazed at the intricacies of the atom, wowed by the great lab experiments, and your best friend will become the Periodic Table. Quantitative concepts such as the mole and stoichiometry are also included so that you can keep your algebra skills sharp. A short introduction to organic chemistry concludes this excellent course.

The Human Experience 11: Psycho-Chemistry

In this course we will not only learn about Bunsen burners, chemical reactions, and explosions but also about brain imbalances, behavior, and psychopathy. General chemistry and psychology are covalently bonded in this exploration of the molecules on an external and internal level in our world.

This is blend of 2 academic courses offering students 8 credits.

Chemistry 11: We are all, in part, a product of our chemical reactions.

Upon completion of this course, you will have your requirements for Chemistry 12 while exploring the role of the chemical world and its connection to mental disorders, processes, and behavior as part of the human experience.

Psychology 11: Who am I?

Together let us explore our own chemical mind and its link to our personality, stresses, memories, aggression, and love through various activities, while applying key psychological principals such as ethics, the scientific method, the brain and, and our perceptions.

Physics 11

Top notch content: 1. Motion - How fast can Spiderman swing? How fast can Gandalf fall? 2. Dynamics - Is Superman a fake? Why is an SUV safer than a Smart Car? 3. Energy - How fast does the PNE roller coaster go? 4. Relativity - How can your parents become younger than you? Can Captain Kirk really beam up? You will make waves and you will use sophisticated equipment like spark timers, air tables, and meter sticks.

Earth Science 11

What causes earthquakes and why can't we predict them? What's the deal with climate change? Why are there sea shells on the tops of mountains? These are just some of the questions we will explore in Earth Science 11. We will cover Geology, Oceanography, Atmospheric Science, and Astronomy. Earth Science 11 is a course designed for students who are excited by the workings of the natural world around them. Before registering in Earth Science, students should consult with their previous science teacher, counsellor, and parents.

Science for Citizens 11

The relationship between “Science” and “Technology” is introduced to the student in Science for Citizens 11. The technological principles students learn in the classroom setting are applied to labs they perform. Some topics covered include: energy, waste management, transportation, communication, health, space, resource management, recreation and the future.

Anatomy and Physiology 12 Traditional Assessment Course (Formerly Biology 12)

Have you ever wondered how you can mix together over 100 trillion cells and have them function together as you? The human body is incredibly complex, and in Biology 12 we will explore that complexity in the structure and function of cells, tissues, and organ systems. You will be exposed to traditional style teaching in this offering of Biology 12. It is an academically rigorous course and you will be expected to have good attendance and work habits to be successful. There will be several labs, a major dissection project and a final exam.

Anatomy and Physiology 12 Alternate Assessment Course (Formerly Biology 12)

Love Human Biology but struggle with tests and exams? This course is designed for someone who wants to earn Biology 12 credits through comprehensive project based inquiry in place of formal tests and a final exam. All lectures and labs remain the same as the traditional Biology 12 course. In lieu of a final exam, students are expected to present a self-directed project. The alternate assessment does not make the course 'easier,' rather it expands critical thinking and deepens understanding of human biological systems. Students may also select an additional Independent Study 12 with this course.

Chemistry 12

Every facet of the Chem 12 course relates to the central concept of Equilibrium. Along the way, we find out why reaction rates are so variable, and how chemical systems attain and maintain balance. We then explore the nature of the equilibria involved in saturated solutions, acid-base systems and oxidation-reduction reactions. Applications of these topics to environmental problems and industrial situations are also discussed. A sound ability in basic algebra is necessary.

Physics 12

Content that engages your mind: a study of why the Universe works so well. Vector kinematics: What is the best way to throw a stick for your dog? Vector dynamics: Han Solo should be squashed. Work, energy and power: Is Wyle E.Coyote a fake? Momentum: Love your seat belt. Circular motion and gravitation: Weigh the earth. Electrostatics: Experience 300,000 volts. Electric Circuits: Shocking Power. Electromagnetism and induction: Weigh an electron.

Physics 12B

Physics 12B is an enriched curriculum that, along with regular Physics 12, is equivalent to a first-year university-level physics course. Topics include: Optics (mirrors and lenses), Waves (electromagnetic spectrum and doppler effect), Nuclear Physics (Fission and Fusion), Quantum Mechanics (photoelectric effect and wave/particle duality), Thermodynamics & Fluids (Heat and hydraulics), and Harmonic Motion (Kepler's Laws of planetary motion). Students taking this course must have already taken Physics 12 or will be taking it concurrently. This class is intended for students who are planning on going into a post-secondary science or engineering program.

Social Studies

Social Studies 10

Mandatory course that explores 20th century History from a Canadian perspective.

Combined Social Studies 10 and English 10

"History will be kind to me for I intend to write it."

With its focus on historical and contemporary social, cultural, political, legal, economic, and environmental issues, this literary study will prepare students for their future lives as Global citizens and members of the International community. This course will combine Social Studies 10 and English 10, along with the opportunity to engage in an independent directed study based off of the course curriculum all in the same semester. The Social Studies 10 portion of the course will cover a vast amount of information, and the skills students will learn through English 10 will not only prepare them for the Provincial Assessment, but also how to analyze information, concisely convey ideas, and communicate effectively.

20th Century History 12

There has never been a more important time in History. This course will allow you to study, analyse, and form opinions on current events and the last 100 years of world history.

Combined English 11 or 12/History 12, Independent Study 11 or 12 (12 credits)

With its focus on historical and contemporary social, cultural, political, legal, economic, and environmental issues, this literary study will prepare students for their future lives as Global citizens and members of the International community. This course will combine History 12 and English 12, along with the opportunity to engage in an independent directed study based off of the course curriculum all in the same semester. The History 12 portion of the course will cover a vast amount of information, and the skills students will learn through English 12 will not only prepare them for the Provincial Assessment, but also how to analyze information, concisely convey ideas, and communicate effectively.

Philosophy 12

Does God exist? How about free will or souls? What is consciousness? Is war ever justified? How about abortion, euthanasia, or torture? What is a just society? In any given situation, how do you determine: what is the right thing to do? How do you know what you know? In this course you will cultivate and refine your critical thinking skills by considering fundamental questions such as these. While the questions hopefully pique your intellectual curiosity, the emphasis is not necessarily on the answers, but on the process of rigorously addressing the possibilities.

Human Geography 12

How do language, religion, and landscape affect the physical environment? How do geography, weather, and location affect customs and lifestyle? Students will explore the diverse ways in which people affect the world around them and how they are affected by their surroundings. Students will discover how ideas spread and cultures form, while learning how beliefs and architecture are part of a larger cultural complex. In addition to introducing students to the fields of Human Geography, this course will teach students how to analyse humans and their environment. At any time a student may choose an aspect from this course to satisfy the Capstone requirements.

Law Studies 12

What are your rights as a Canadian citizen? Why do some people seem to receive lighter/heavier sentences in our criminal justice system? Learn the facts about the different aspects of law and analyze multi-faceted aspects of cases. Also students will get opportunities to debate issues and participate in mini and mock trials, using actual Canadian legal cases. Society, cultures and community attitudes may influence and sometimes be in conflict with our laws. The law is always a reflection of the values of our society. Decriminalization of marijuana is a perfect example of laws changing to reflect the values and beliefs of the current society. As a Canadian citizen, it is crucial that you understand the basics of the laws in our country. Come join us.

Comparative Cultures 12

Have you dreamed of visiting the great places in history, where generations of people shaped the great civilizations with religion, art, architecture, philosophy, technology, music and adventure over the past 2500 years? Are you interested in experiencing this study in new and sometimes hands-on way? Are you Interested in visiting the Vancouver Art Gallery, or sitting in on a symphony performed by the Vancouver Symphony Orchestra? Are you interested in learning this in a demanding and intellectually challenging course, but one that leads us to a deeper, more sophisticated understanding, not only of our world but ultimately of ourselves? Come span 2500 years from the birth of the great civilizations of the past right to our world of today! Come to Comparative Cultures and Religions!

Home Economics/Foods

Foods 1- Foundations of Cooking and Baking

Clueless in the kitchen? Want to move beyond a bowl of cereal when hunger strikes? Foods 1 will provide you with the tools and the know-how to feed yourself well. Emphasis will be placed on survival cooking and learning all of the fundamental skills needed to be a blossoming chef. You will learn and practise the skills that have been recognized by chefs as the top 50 skills needed in the kitchen as well as a review of the three methods of mixing in baking. You will practice all of the various methods of cooking and know when and why the method is used. Students will learn how to prepare healthy, delicious meals in less than an hour. Students will analyze nutrition facts, extend their knowledge of food sustainability issues and making connections regarding the dietary needs of special groups of people. Local First Nations Peoples food protocols, including harvesting/ gathering and ceremonial uses will be examined. Emphasis will always be placed on kitchen and food safety as well as proper handling and cooking techniques. Students **MUST** be willing to work cooperatively in groups, clean up and complete written assignments as part of the class. **Pre-Requisites- none Grades- 10, 11, and 12**

Foods 2- Global Foods (Intermediate)

“We all eat, and it would be a sad waste of opportunity to eat badly.” Anna Thomas

Foods 2 is a broad exploration of food that focusses on kitchen basics, nutrition, cooking techniques and theory that will allow students to develop their skill set and confidence in the best room of the house. Classes are highly participatory with ample group work and hands-on activity. This course looks at foods from around the world and students will have the opportunity to create dishes from the Caribbean, parts of Asia, Oceania, Europe, and North and South America. This course gives students an opportunity to deepen their understanding of food security and food science. Students will understand the function of ingredients and demonstrate an ability to use these ingredients creatively while managing time effectively. Students will also make connections between food marketing practises and their impact on specific groups of individuals. Students **MUST** be willing to work cooperatively in groups, clean up, and complete written assignments as part of the course. **Foods 1 is recommended.**

Foods 3- Intermediate

Julia Child once said, "People who love to eat are the best people." This course is for the food-loving student who has already completed at least one level of Foods and wants to keep learning about cooking and baking. Building upon Foods 1, this course's goal is for the student to be completely competent in the kitchen. Students will move through a variety of cuisines, practising techniques and becoming familiar with flavour profiles. Students will have the opportunity to choose some of their recipes as well as design some of their own dishes as well as improvise with ingredients. Students will work on timing their dishes and components of multi-course meal development. Students will explore appetizers; soups; salads; main dishes (vegan, vegetarian, and meat); sweets and desserts. Students will gain some insight about food philosophies and local/global food justice issues. Students **MUST** be willing to work cooperatively in groups, clean up, and complete written assignments as part of the course. **Pre-Requisites- Either Foods 1 and/or 2 is highly recommended. Grades- 11 and 12 ****Students can take both Foods 3 and Foods 4******

Specialized Studies in Foods 12

Who is this class for? This class is for students who love to cook and bake but perhaps have not been able to enjoy traditional food classes in the past due to dietary concerns or issues. This class is for the foodies who want to look for recipes that inspire them, work with ingredients they have never heard of before, be challenged to try new things. This is a class for those who want a challenge and are motivated to add to their personal recipe books and add to their cooking repertoire.

Textiles 10-12

If you have an interest in textiles and want to learn how to make your own clothes, or perhaps do some crafting using textiles, learning textile finishes, and being creative in a new medium.... textiles is for you! Textiles is a fun, creative fusion of art and textiles. Learn printmaking and fabric finishing techniques to create custom fabrics for use in fashion, art and décor projects such as Shibori, Silkscreen, Cyanotype, Block Prints, Ombre dyeing, Batik, and Tie Dying. Then design and make your own textile creations (bags, pencil cases, clothes, toys, pillows, clothing, etc.) with your one-of-a-kind custom print fabrics. There will also be the opportunity to make a variety of clothing using printed manufactured patterns and explore the use of different fabrics. If you are more interested in crafts using fabrics or you would rather learn how to work with yarn and wool, come in with your ideas and let's get busy.

Housing and Living Environments 12

Have you ever wanted to design your own dream home? How we live shapes our environment, just as our environment shapes how we live. Consider specific environmental considerations such as location, climate, resources, etc., when designing your dream home. Have you thought about a career as an interior designer? You will learn how to create an inspiration board for a room in your dream home. Have you thought about a career in urban and community planning and design? Have you considered how the needs of a community can change over time? This is your opportunity to look at your community and its needs and propose a project for your community such as senior housing or perhaps a skate park. Have you ever wondered what it means for housing and businesses to be accessible? After observing and experiencing what it is like to not have easy accessibility, you will get the opportunity to design an accessible area such as a business, office, classroom, kitchen, etc.

Grade 12 Credit and Open to Grades 11-12

Languages

French 2

Parlez-vous français? Students may look forward to improving their language skills and learning about French culture. While important for university entrance, French 2 also emphasizes the development of an increased proficiency to allow students to travel with a basic understanding of the language. The course also helps students proceed to a level of fluency necessary for increased employment opportunities. **Must have completed French 1 or French 9**

French 11

Vous voulez parler en français? A challenging course that helps students obtain a second language requirement for university entrance and, better yet, improve speaking and comprehension of Canada's second language, a language that is spoken all over the globe. Emphasis is on listening, speaking, reading and writing. Themes will be centered on sports and leisure activities, health, relationships, school, and the outdoors. Verb tenses, pronouns, and other grammatical structures will be reinforced to help students in their written and oral expression. **Must have completed French 2**

French 12

Ah Oui!! Je parle français!! By participating in real-life activities, students will develop and enrich their grammar and vocabulary acquired in previous levels. Themes will be focused on travel (le voyage), the arts (les arts), law (la loi), and the environment (l'environnement). Written and oral expression are what we aim to enhance in French 12 by reading articles, prose and poetry by francophone authors, by participating in "les débats" and doing things that we love to do all the while speaking "en français". (Students successfully completing French 12 can be excused from a first-year language in pursuing a Bachelor of Arts Program at university.)

Spanish 1

¿Quieres hablar español? There are different reasons to join Spanish class: a university requirement, you'd like to communicate while traveling in Spanish speaking country or you'd like to speak another language. In Spanish 1, you will learn how to introduce yourself, talk about likes and dislikes, tell time, learn vocabulary about school, clothing, food, family, and more. As Spanish is the second most spoken mother tongue of the world, your learning will come handy at some point.

Spanish 2

Mi clase es su clase. Even if you have never spoken any Spanish you can learn by listening and learning lots of words, simple structures, and trying to express yourself in Spanish, which is the second most spoken mother tongue of the world! Students are expected to appropriately respond to in-class Spanish instruction, participate in spontaneous conversation, read a sight passage orally with correct pronunciation, as well as write short compositions and do oral presentations. Students will learn greetings and customs, phonetics and the alphabet, counting to 1000, telling time, and the ability to engage in simple conversations. Verb conjugations in the present, past, and imperative tense are also introduced, as are important irregular verbs such as ser, estar, ir and tener. Themes will focus on school, leisure activities, home and family.

Spanish 3

¡Vamos a hablar más y más en español! At the conclusion of Spanish 11 you are going to be able to comprehend (comprender) and speak (hablar) with greater fluency and complexity. Responding appropriately to in-class Spanish instructions, participating in spontaneous conversation, reading orally with correct pronunciation a sight passage and writing short compositions, as well as presenting projects to the class will become más y más fácil (easier and easier). Even talking about things you are doing today, have done in the past, and plan to do in the future can be done in ¡Español!

Physical Education

PE 10

Having fun while being active is the focus of PE 9 and 10. Students can expect to participate in traditional PE activities as well as learning new skills, sports and games. As in all PE courses, working on individual fitness will also be a component of this course. Students can expect to explore various methods of improving or maintaining fitness. A weekly jog is mandatory. Athletic clothing and footwear are required.

Co-ed PE 11/12

Want to keep fit and have fun? Students can expect to participate in a variety of team and individual sports in a co-ed setting. Working on individual fitness will also be a component of this course. Community recreation activities will take place only if funding is available.

Body Zen 10/11/12

If you're looking for an ALL GIRLS class where the focus is on overall wellness, then Body Zen is for you. This course will take place in a non-competitive and non-judgmental environment, where there is no need to feel self-conscious or discouraged by your level of skill or ability. Physical activities will include: yoga, a weekly walk and/or jog, Pilates, video led exercise programs, as well as other activities the class is interested in exploring. Together we will develop body-mind awareness and the ability to nurture your own well-being. Namaste.

Fitness PE 10/ 11/12

This course is designed to provide you with the knowledge and skills necessary to improve your personal fitness through participation in a variety of activities at different intensity levels. You will learn how your body moves and functions to help you stay safe during exercise. A key component will be creating, implementing and reflecting on a personalized fitness program where you follow proper training guidelines and techniques to help you reach your health and fitness goals. Each week the classes will be structured to meet different components of physical fitness including strength training in the weight room, cardiovascular training (a weekly run in the Beaver Lodge Lands), flexibility (weekly yoga), and active living (possible gym games or off-campus activities). We will also discuss how personal choices influence your health and fitness goals.

Fields PE 10/11/12

Fields PE is a course for those who are drawn to the outdoors. Rain or shine, we will be out on the field learning skills, working on our fitness, and playing a wide array of outdoor sports and games. As we like to say in the PE Department, "There is no bad weather, just poor clothing choices." If you register for this course, be sure that you have warm, waterproof clothing, cleats, and a full change of clothes every day. Units will include: softball, football, soccer, ultimate Frisbee, lacrosse, and kickball. We will also take advantage of the Sportsplex facilities on occasion.

Basketball Academy PE 10-12

Basketball PE is a course for those basketball enthusiasts who are looking to develop their individual and team skills in a competitive environment. If you seek a PE course with a greater fitness component, more intense competition, and higher expectations—all with a basketball focus—this is the course for you. (While we will focus on basketball, students can expect to participate in other PE activities throughout the course). Enrollment priority will be given to those who have displayed dedication to the sport and a positive attitude/work ethic in previous PE courses.

Volleyball PE 10-12

Volleyball rocks at Timberline! This award winning program is aimed at students with a strong desire to play competitive volleyball. Students can expect to learn a variety of skills, strategies and systems in the sport of volleyball. Knowledge of rules and officiating are included as well as a weekly run. Other P.E. activities, jump training and individual fitness are included in this course. Gym strip, indoor court shoes, as well as outdoor running shoes are required.

Volleyball Academy 9-12

This program is designed for experienced volleyball players looking to bring their game to a higher level. We will provide the opportunity to work with Volleyball Canada certified coaches and there will be a fees structure to this course. The details for this program will be provided to students who express an interest in the course.

Technology Education

Drafting 10

Do you enjoy working with computers, puzzles and problem solving? Drafting is precision drawing used to create an accurate representation of an object. Students create basic shapes right to industry standard projects using drafting and software called AutoCAD. This course is for those interested in careers such as: drafting, engineering, interior design, industrial design, architecture, carpentry, steel fabrication, cabinet making, electrician, plumbing, heating, or any one of the numerous other professions which demand knowledge of drafting.

Electronics 10 -Robotics

Head to head battles between metal behemoths fighting for supremacy on the field! Well, not quite that exciting, but we will be building robots and having head-to-head competitions to see who built the strongest, fastest, best design. Learn basic theory of electronics, tools and test equipment, programming, basic metalworking and machining, design, and mechanical principles.

Woodwork 10

Do you enjoy creating something from scratch that you or somebody else can use in everyday life? You will explore different aspects of furniture building and creative woodworking design. Emphasis is on quality work and safe use of various hand tools, power tools and machines. You could make a small table, a laminated serving tray, bowls and pens on the lathes.

Mechanics 10

The engines roar, the crowd screams... but only if you fix the carburetor correctly. "What's a carburetor?" you ask. Come find the answer and lots of other interesting information about chain saws, lawn mower engines, dirt bikes, model gas engines ... we do it all.

Jewellery & Metal Art 10

Jewelry, Christmas tree ornaments, Valentines Day gifts, artistic metal sculptures for the garden can all be yours. Learn the safe use of metalworking hand and power tools and techniques, such as soldering, welding, brazing, forging, cutting, filing, etc. Projects might include wind chimes, mobiles, candle holders, wine racks, wire sculptures, candle sconces, silver rings, pendants, bracelets, earrings, copper enameled items or etched glass.

Drafting 11/12

Do you have an interest in architecture, graphic art, fashion design, advertising layout or carpentry? This course may be for you! Drafting 11 is a continuation of Drafting 10, which begins by having students represent objects by creating mechanical drawings using drafting software called AutoCAD, just as objects are drawn in industry. From there students are taught the basics of house design and floor plans, and then they design and create their own 'dream' house using Google Sketchup. Grade 12's who have taken DD 11 previously will be able to start by surfing the net for the lot of their dreams. Then, with help from some introductory assignments, students design and draw a house and garage to be built on that lot. By the end of this course, students have a sound grasp of housing/construction terminology, plot plans, floor plans, and elevation drawings.

Jewellery & Metal Art 11/12

Jewelry, Christmas tree ornaments, Valentines Day gifts, artistic metal sculptures for the garden can all be yours in this class. Learn the safe use of metalworking hand and power tools and techniques, such as soldering, welding, brazing, forging, cutting, filing, etc. Projects might include: wind chimes, mobiles, candle holders, wine racks, wire sculptures, candle sconces, silver rings, pendants, bracelets, earrings, copper enameled items or etched glass.

Woodwork 11/12

Come down to the woodshop and see what everybody is talking about. We're building projects that you will hang on to for a lifetime. Whether you have taken Woodwork before or not, this course will present fun, new challenges. While building beautiful pieces of furniture, students will be taught how to use all the tools and machines in the shop safely. They will be introduced to basic machine operations as well as some complex machining and jig use. After a couple of mandatory projects, students are encouraged to build their own masterpieces and, if desired, can even cut their own wood from local trees with the sawmill behind the shop! Grade 12's who have successfully completed Carpentry and Joinery 11 are encouraged to challenge themselves in the shop researching, designing and building a minor and major project of their choice.

Electronics 11/12

We won't be flying kites in lightning storms or licking 9 volt batteries. What we will do is find out why those are both bad ideas and lots of other interesting aspects of electricity and electronics. You will learn basic theory, the correct use of tools and test equipment, troubleshooting procedures, and soldering techniques, all while constructing electronic projects. Topics will include residential wiring, bread boarding techniques, and building printed circuit boards. We may also explore some basic robotics. In grade 12 you will continue to develop the skills learned in Electronics 11 by constructing more complicated projects and should be able to design circuits from schematic diagrams. By using more advanced test equipment you will be able to troubleshoot more difficult circuits.

Robotics 11/12

Head to head battles between metal behemoths fighting for supremacy on the field. Well, not quite that exciting, but we will be building robots and having head-to-head competitions to see who built the strongest, fastest, best design. Learn basic theory of electronics, the correct use of tools and test equipment, programming, basic metalworking and machining, and design and mechanical principles.

Mechanics 11

The engines roar, the crowd screams... but only if you fix the carburetor correctly. "What's a carburetor?" you ask. Come find out the answer and lots of other interesting information about chain saws, lawn mower engines, dirt bikes, model gas engines ... we do it all. This is a grade 10 power mechanics course open to grades 11 and 12. The credit will be for TEC 10. Grade 11s and 12s who have already taken TEC 10 may re-take this course with approval of the instructor.

Skills Exploration 10-12

Do you plan to live in a house or apartment, or own a car some day? Gain valuable hands-on experience in 4 important trade sectors – Carpentry, Electrical, Plumbing and Mechanics, as well as being introduced to core skills common to many trades. Whether you intend to work in a trade or only want the skills to perform basic repair and maintenance on your own house or car, this is the course for you. During the semester we will build a small building, add some simple wiring for outlets, switches and lights, and install basic plumbing – a sink and a toilet. Separate from the small building will be a unit on basic mechanics. The course is one time only and is open to any student in grades 10-12.

Digital Hackerspace

Timberline's Hackerspace is a vibrant community of students with common interests in computers, technology, art and games. The goal of the Hackerspace is to create hackers, in the original sense of the term: students who are capable of using technical knowledge and creativity to overcome problems with playful cleverness.

All Hackerspace courses are run concurrently in a multi-course, multi-grade classroom. Digital artists, photographers, game designers, animators and programmers in Grades 10-12 are in the classroom together, creating great potential for collaboration. Courses are taught in a teacher-guided, self-directed manner through our custom designed online learning platform.

Computer Modelling & Animation 10/11/12

Create 3D models, then bring them to life by animating them, or print them on the 3D printer! Learn the principles of box modelling, mesh modelling, rigging, animating, UV mapping and texturing, lighting and rendering. This course uses Blender, a 3D computer graphics program used for creating animated films, visual effects, art, digital sculpting, 3D printed models, and interactive 3D applications.

Digital Art & Design 10/11/12

Develop your creativity, skills and style, and apply the elements of art and design to create powerful images and tell stories with your digital art. Learn how to use a suite of free and open source software through both guided and self-directed projects, including Krita for digital painting, drawing, and 2D animation, and Inkscape for illustration and graphic design. Get comfortable using a WACOM drawing tablet that is sensitive to the pressure, speed, and tilt of your hand. Draw with a digital pencil, pen, pastel, watercolors, oil paints, or almost any other brush you could imagine. If you're interested in applying to post-secondary art programs, you can build your portfolio of digital creations in this course.

Digital Hacklab 11/12

If you think the courses offered in Timberline's Hackerspace all sound interesting, take this course so you can dabble in all of them! Or if you have a specific digital project you are interested in that doesn't quite fit into the other courses, the Hackerspace can provide you with the place, resources, and guidance for you to hack away. Some past project examples include tinkering with the Raspberry Pi to turn it into a multi-media hub for the class, using the Canon Hack Development Kit (CHDK) to install an alternate OS on a Canon digital camera, removing the polarizing filter from a computer monitor and building specialized glasses needed to view the screen. Students have even built a working computer submerged in a fish tank. Explore the digital world!

Game Design 10/11/12

Create graphically intense 3D levels or a simple 2D platformer using the Godot Game Engine. Learn about level design, asset creation and scripting so you can create all your favourite kinds of games, including mobile, puzzle, 2D, 3D, FPS, RPG and more!

Web Development 10, Computer Programming 11/12

In Web Development, create your own web pages from scratch with HTML, CSS, and Javascript. In computer programming, you'll learn the basic structures of all computer programs: variables, conditionals, loops, lists, methods, and objects, while creating simple programs and solving coding challenges. Intermediate topics include virtual environments, object oriented programming, APIs, list comprehension, regular expressions, magic methods, threading, and Django. Advanced programmers will embark on larger projects that suit their passion.

Artificial Intelligence 12

This course involves a combination of math concepts and computer programming skills to create your own neural network, then apply machine learning algorithms to teach it new things. Major topics include linear and matrix algebra, linear and logistic regression, decision trees, activation functions, backpropagation, gradient descent, and loss functions. Students with no prior computer programming are welcome but they should have a strong math background and enjoy playing with numbers.

Digital Media

TSN Digital Media Broadcasting 10/11/12

Imagine going live every day for 10 minutes in front of the whole school – being the face Timberline students see every morning on their TV’s. Well this is what the students do who take TSN Digital Media Broadcasting. Timberline has a closed circuit TV system and studio within the school, which enables us to go live every day. Students will have the opportunity to use techniques and technology used in professional television production such as: video and audio recording equipment, lighting, television studio operations including directing and on-camera performance, and the use of digital editing and graphic creation systems. Students will become competent in shooting interviews and visual storytelling by enhancing technical, artistic and practical skills through the use of Final Cut. These skills will then be applied to the production of video news reports, documentaries and features for the live broadcast which is aired on a daily basis. It is very much a hands on course requiring high energy, a positive attitude and the ability to work with a group. Cataclysmic!

Media Arts 10

“And . . . Cut!!!” Have you ever wanted to say these words? You will if you take Media Arts 10. This course is designed as an introduction to video production work. Students will learn to film, edit, mix audio, lighting, develop scripts, and produce short film segments. This course uses several short assignments to introduce computer editing, cameras, audio equipment, mixing lighting, script development and much more.

Digital Photography 10/11/12

Learn the rules of photo composition, how to use the settings on a DSLR camera, and how to work with lighting and other photography equipment, to take interesting, creative photos. Find the beauty in small details, capture fleeting moments, and tell a story with your images. While you’re at it, why not combine your camera skills with photo manipulation and turn yourself into a zombie?

Media Arts 11/12 Independent Studies

Have you ever wanted to create your own learning path? Well in Media Arts 11/12 IDS you will have this opportunity. After an intense study of a series of media arts skill sets, students will be able explore their own personal passion of film making in the following areas:

Editing for Effect; Extreme Filming; Short Narrative Film (Comedic or Dramatic); Experimental or any combination of these. Freedom to choose individual projects will be provided as well as numerous resources including teacher support, technical support and a number of filming and editing resources including a drone, dslr cameras, mobile gimbal, 3D camera and 4k gimbal.

Final marks will be determined not only through the creation of final projects but through the learning process itself as well.

Business Education

Entrepreneurship 10

Students will learn: What opportunities exist for entrepreneurs, the characteristics that entrepreneurs share, ways to add value to an existing idea or product, differences between invention and innovation, barriers that various groups of entrepreneurs face and the factors that contribute to their success, the life cycle of a product from invention/innovation to marketplace. During this course, students will also be able to complete the Career Life Education graduation requirement.

Entrepreneurship 11/12

students will learn: Opportunities for initiating an entrepreneurial endeavour, characteristics of the global market, personal networking, market analysis, ways to control and manage cash flow and tracking expenses, business registration and taxation, sources of funding and support for a venture. During this course of this program students will also complete the CLC course graduation requirement and their capstone project.

Accounting 11

This is an introductory bookkeeping course that includes: the role of accounting in business, career opportunities in accounting, accounting principles and practices, the accounting equation, the relationship between debit and credit entries, the accounting cycle, using source documents and completing general journals, ledgers and trial balances, the chart of accounts, preparation of financial documents, financial decision making based on financial documents.

Accounting 12

Students must have taken Accounting 11 as it is a requirement for Accounting 12. This course carries on the study of Accounting 11 and will include: financial reporting for sole proprietorships, partnerships and corporations, accounting practices and principles, accounting for wages, inventory systems, detailed ledger accounts and specialized journals, account reconciliation, internal controls to protect assets and ensure accuracy.

Performing Arts

Acting 10 - 12

The senior acting class provides students with an opportunity to further develop their acting skills exploring characters through their goals/motivations, status, history while fine tuning their acting instrument (voice, face, body). This course will use scripted scenes, and class productions to give all students an opportunity to experience many character types.

Musical Theatre 9/10/11/12

A major musical will be performed in the spring. The bulk of rehearsing and preparation for this performance will require an out-of-timetable commitment. Actors will audition for parts. If you want to be involved behind the scenes – set design, lights, costumes, or makeup, sign up for Stagecraft. Auditions are required for this course.

Technical Theatre

Technical theatre is a NEW 'in the timetable' course in which you explore all the areas that go into making a production come to life. This hands-on course will teach the basics of set construction, scenic painting, lighting design, sound, the basics of costume design and stage makeup. If you are interested in using these skills to support the annual Musical, you should also sign up for Stagecraft.

Stagecraft 9/10/11/12

Stagecraft is an 'out of timetable' course in which students become the build and run crews for our annual Musical Theatre production. Credit is based on accumulation of hours on tasks such as prop building and set painting, as well as working backstage or in the tech booth doing lights/sound for the show. If you are looking for an 'in the timetable', lesson directed option, sign up for Technical Theatre.

Concert Band 9/10/11/12

Ability to play a wind or percussion instrument is a prerequisite as well as completion of a band course or permission of the instructor. Band 9, 10, 11, 12 students should have successfully completed band at the Grade 8 level. Music performed in class and in concert will cover a diverse selection of musical styles, from classical to pop, marches to contemporary. Technique and theory will continue to be developed. A number of concerts will be arranged throughout the year and attendance at these functions is mandatory.

Jazz Band 9/10/11/12

Students will continue to develop their performance skills in the jazz idiom. Improvisational skills will also continue to be developed. A number of concerts will be arranged throughout the year and attendance at these functions is mandatory. Jazz Band is open to Concert Band students with teacher permission.

Visual Arts

Art Studio 10 / 11 / 12

Unleash your creativity through drawing, painting and graphic arts. Explore a wide range of media, including graphite, charcoal, chalk pastel, oil pastel, watercolour, acrylic paint, collage, printmaking and more. Create original images influenced by a variety of sources including observation, memory and imagination. Students will be encouraged to develop their personal style through both guided and self-directed projects.

Drawing and Painting 10 / 11 / 12

Take your drawing and painting skills to the next level in this course. Explore a wide range of media, including graphite, charcoal, pastel, watercolour, acrylic and more. Create original images influenced by a variety of sources including observation, memory and imagination. Students will be encouraged to explore their creativity and develop their personal style through both guided and self-directed projects.

Graphic Arts 11 / 12

Build your drawing skills and learn to apply the elements and principles of design to create powerful images and tell stories with your artwork. Develop your skills in illustration, printmaking and graphic design using a range of materials, processes and technologies. Students will be encouraged to explore their creativity in graphic arts through both guided and self-directed projects.

Advanced Art Portfolio 12

Are you excited about the artistic opportunities that await you after graduation – illustrator, graphic designer, painter, fashion designer, photographer, animator...? Your ticket into a post secondary visual arts program is your physical and digital portfolio. In this course you will be given assistance in raising your artistic skills, refining your personal style and putting together your body of work – your portfolio. Throughout this advanced course each of your pieces will be photographed, reflected upon and uploaded into your digital portfolio for college admissions, art exhibits, or personal use.

Ceramics and Sculpture 10 / 11 / 12

Create curious creatures, unique dishes, abstract sculpture and more in this hands-on 3D course. Master the basic techniques of hand-building with clay and then give the potter's wheel a try. Learn how to apply glazes to make your projects look like finished works of art. Make functional ceramics for your kitchen, or let your imagination soar – if you can imagine it, you can create it in this class. Other 3D activities may include wire sculpture, found object sculpture, papier-mache, mobiles and origami.

Human Services & Social Sciences

Psychology 11

Psychology is defined as the scientific study of the brain and mental processes. In Psychology 11 we explore why we think the way we do, and try to answer the nature vs nurture debate: Are we more influenced by our genetics, or the way in which we are raised? In this course you will learn all about the brain, why we behave the way we do, and how we learn even the simplest tasks. There are many careers that find value from a knowledge of psychology; from teachers to police officers, counsellors to health professionals, all can benefit from a background in understanding human behaviour. This course is open to students in Grades 10-12.

Psychology 12

This course builds on the basics learned in Psychology 11 in examining human development, the connection between stress and health, the causes, symptoms, and treatment of psychological disorders, social influence and more. It is recommended that students take Psychology 11 first, however, Grade 12 students may take the course without pre-requisite.

Psychology 12 Inquiry (Independent Directed Study)

This course is open to students who have completed Psychology 12 and want to focus on one or more topics in psychology in depth. Students will develop a personal program in coordination with the teacher to examine areas of interest in the field of psychology.

Interpersonal and Family Relationships 10-11

This course looks at human development from conception to death. We will explore internal and external factors that affect development. We will look at relationships and what makes a relationship healthy and what makes a relationship toxic. The importance of effective communication will also be examined. We will be exploring the big concepts through film and stories in the media. This course will employ discussions, debates, and reflections as we ask ourselves some of the big questions facing our society today.

Child Development and Caregiving 12 (formerly Child Psychology 12)

This course is all about children: why and how we have them, theories of development and ways to care for them, and how children are raised in different cultures. You will be asked to think about your beliefs and attitudes toward children, and to consider what your personal approach to children and their care might be. Students will also be placed in an elementary school to provide academic and/or social-emotional support to younger students for part of their program. This course is open to students in Grades 11 or 12 and is a great option for students hoping to pursue a path in childcare, education, youth counselling, or health.

Leadership 9/10/11/12

Are you interested in making Timberline the best it can be? Then this is for you! Students will meet at 7:30 a.m. every Wednesday and Mondays at lunchtime as a full class and will attend other small committee meetings at various times. The class will work in many areas of Timberline including the organizing and administration of events such as holiday activities, school improvement, staff appreciation, multiculturalism, conferences, foster child, toy drive, food drive, fund raising, and spirit activities. The class will cover skills in time management, public speaking, meeting management, event organizing, public relations, reflection and evaluation. Students will also play a role in the following: Timberline's Intramural Athletics Program, our school's Terry Fox Run, and the end-of-year Athletic Banquet.

Sports Leadership 9-12

If you enjoy sports, are self-motivated, and want to be part of a vibrant and dynamic team, this course is for you. Participants will gain valuable experience while meeting the expectations and responsibilities associated with organizing and operating a wide variety of athletic events. Central to the program is the organization and operation of an inclusive intramural program. Students will also assist sports teams and coaches at Timberline and in the larger community. Other responsibilities will involve: coaching, tournament organization, score keeping, officiating, planning/operating elementary school events, and organizing/operating Timberline's Athletic Banquet. This is an outstanding opportunity for students to build lasting community connections and load the volunteer section of their resumes! Sports Leadership is a year-long course operating outside the regular timetable with class meetings taking place at lunch and or prior to class in the morning. In addition to this, students are required to complete volunteer work each semester.

Outdoor Adventures Program 11/12

Outdoor Adventures 11/12 (ODA) Program will take full advantage of the amazing natural world surrounding Campbell River to help each student reach their potential, academically, physically and globally. This is education through an inclusive program of Outdoor Education, Geography 12, Comparative Civilizations 12, and Literature 11/12.

We schedule seven “away” adventures running from September to February where the students of this course will be involved in their studies in a variety of environments from the classroom to the mountains, from paddling across lakes to rock climbing, winter camping and safety courses. We will also be involved in a number community-based projects.

It is a student focused one semester course designed for those who seek an Adventure in their high school experience. The “Capstone” requirement can be met through a personal reflection on any aspect of our outdoor explorations, join up and find out more!

Outdoor Education

Timberline has been running outdoor adventure opportunities for over 20 years where our students have explored the backcountry in a wide range of adventures. The ODA takes this to the next level with multiday trips ranging from hiking to the beaches of Cape Scott Provincial Park exploring coastal landforms and local history, paddling Main Lake Provincial Park learning about freshwater resources developing canoeing and trip planning skills. We climb through the forests of the Forbidden Plateau ascending alpine ridges to Mt Albert Edward. We then switch to boat travel so we can visit the Surge Narrows community school on Read Island, visiting families living "off the grid" from Maurelle to Rendezvous Islands. There is also bike tripping Denman and Hornby Islands to explore a world renowned sculpture park and learn about small community recycling. All these adventures come with extensive training in safe backcountry travel, group dynamics, environmental awareness, leadership and skills development. We even take the time to learn about equipment design and building. All done in a small class environment.

Literature 11/12

Do you like to read for enjoyment or find it a struggle? Interested in exploring the story, narrative, and oral traditions found in western, First Nations and eastern genres? Would you like to but never seem to find the time to just read? Would like to be able to work with a small group to share and understand the role stories play in our lives? Have a chance to construct meaningful personal connections between self, text, and world around us? Well, the ODA Lit course is the place for you! With our diverse open classroom that include the beaches, forests and mountains in our region, visits to other communities and having the time to focus on reading and writing, you will have the opportunity to grow your understanding of the importance of literature in your life with us.

Comparative Cultures 12 See description on [page 22](#) of course guide

Physical Geography 12

Imagine a course that will help you plan for travel while giving you a credit for the “Capstone” requirement just by picking a place in the world you would like to visit! Do you like to see things blow up? Interested how ski hills are created? Interested in exploring mountains, jungles, deserts, and glaciers kilometers high? Do you like to discuss global issues? Want to explore some of the most interesting places to travel? Love / hate getting lost? Like building things? Well Physical Geography 12 is the course for you! Here, science and the humanities meet in a fantastic five-month exploration of the charted and uncharted places on our planet all the while learning how, as humans, fit into this global adventure story. We study locations, environments, resources, and people, locally and internationally. Geography. It’s not just about maps anymore!

For more information, pictures equipment list and “meet the teacher, Mr. Steve Joyce please check out the ODA page at the school’s website.

Career Life Education/Connections and Capstone

The 2018 graduation requirements have students complete a three part careers program beginning in grade 9 and culminating in grade 12. This is an 8 credit program that is run outside and inside the timetable. Students will meet during required flex blocks and scheduled appointments to meet many of the requirements of the program.

Career Life Education 10

The Career Life Education curriculum is designed to help students learn of to effectively manage their life journey toward several possible preferred futures. Through purposeful career-life development, students learn to recognize their evolving interests and strengths, refine their learning goals, and apply this self-knowledge to exploration of post-graduation possibilities in diverse education, work related, and personal life contexts. **This is a mandatory grade 10 course.**

Career-Life Connections 12 /Capstone 12

Career-Life Connections 12 is a graduation requirement and includes the completion and presentation of a Capstone Project. All Grade 12s will be automatically enrolled in the course, and it is delivered outside the timetable through Microsoft Teams. Students will complete a series of assignments relevant to planning for life after high school, as well as develop a culminating project in an area of interest/field related to their future goals.

Work Experience 12A and 12B

Do you have a part time job? Work Experience 12A is now in the timetable as an afternoon program due some changes at the Ministry of Ed. This program can now be one or two of your Grade 12 credit programs as it can no longer be scheduled outside the timetable. Work Experience 12A is meant to be an introduction to the world of work. If you have a part time job you may be able to use that part time job for credits towards WEX 12A. If you are looking for work or would like to try some work placements you will have all afternoon to check out the world of work and get credit for the learning you do.

Work Experience 12B is also available to students for credit but the requirements are a little different. See Ms. Camerin for details on taking both of these programs.

Community Adventures 10/11

It is often said “it takes a community to raise a child.” The other side of that saying might be “It takes a child to enliven a community.” As the keepers of knowledge, our community is a place of learning and experiences. Join Community Adventures 10/11 and apply your math skills in the community receiving credit for Workplace Math 10 or 11. How can you possibly know what you want to do in the future if you never try out the options. Through the 2 blocks of Coop 12A and 12B students will spend time in the community working with such organizations as the Greenways Land Trust, the Volunteer Centre, Teen Flight, individual businesses and schools and mentors who will expand your knowledge of the community you live in and where your skills and talents lie. This 4-course specialty will also provide you with credit for Career Life Education 10 if you are a Grade 10 student or Entrepreneurship 12 if you are a Grade 11 or 12 student. Join us as we explore how courses relate to community skills and help build networks for the future. This selection takes up 4 blocks in 1 semester.

Note: This 4 course specialty will only run if we are no longer in Covid –19 restrictions.

See Ms. Camerin for details

Post Secondary & Dual Credit Options

Dual Credit options are a way for students to earn post-secondary credits while attending high school. Students will receive grade 12 credits in addition to their post-secondary credits, which count towards fulfilling graduation requirements. Opportunities range from apprenticeship training to 1st year courses that are transferable to most universities. These programs are run through North Island College and can be arranged through the school career facilitator.

University Transfer Courses

English 116-Essay Writing and Indigenous Perspective (through NIC as Independent Directed Study)

English 116 introduces university-level research and writing in the humanities and social sciences and/or natural sciences with specific focus on contemporary Indigenous issues in Canada. Students will critically analyze and study the writing, oral and aural practices of Indigenous scholars and teachers in a variety of disciplines and settings. Emphasis is placed on respecting and interweaving non-Indigenous and Indigenous ways of knowing and research methodologies in writing in a post-secondary research paper. Pre-requisite a "C" standing in English 12 or First Peoples English 12. See Mr. Lontayo to apply. Applications are due no later than May 31, 2018. Students will be required to purchase their books and pay NISU fees and Learner Resource Fees. SD72 may assist with the cost of tuition. **This program is only available 2nd semester of Grade 12 during Block B. Prerequisite is a "C" in English 12.**

Criminology 101-Introduction to Criminology (at North Island College as an Independent Directed Study)

Criminology 101 is an introduction to the core concepts, basic data sources and general research findings in the field of Criminology. A key focus is on elements of continuity and discontinuity between traditional and contemporary theories of crime, deviance, criminality and social control. Particular attention is paid to the Canadian context. Pre-requisite a "C" in English 12. See Mr. Lontayo to apply. Applications are due no later than May 31, 2018. Students will be required to purchase their books and pay NISU fees and Learner Resource Fees. SD72 may assist with the cost of tuition. **This program is only available 2nd semester of Grade 12 in Block A. Prerequisite is a "C" in English 12.**

Business 100 (At North Island College as an Independent Directed Study)

This program is a first year requirement for any student interested in Business courses at the college or university level. The program is an introductory view of financial accounting. Students will be introduced to financial statement preparation as well as how to analyze a financial statement. Prerequisite to get into this program is a C in Pre Calculus 11 and English 12. See Mr. Lontayo for details.

Business 132 (At North Island College as an Independent Directed Study)

This program is also a prerequisite for any student heading to a college or university level business course. Prerequisite for this course is a C in Pre Calculus 11 and English 12. Students will study a variety of topics such as interest, discounts, amortization, annuities, bonds and capital decision making models. See Mr. Lontayo for more details

Train in Trades Programs

School District 72 is pleased to be in partnership with North Island College and Industry Training Authority. This partnership allows students to attend North Island College Trades Program and get advanced credit through the Youth Train in Trades program, formerly called the ACE-IT program (Accelerated Credit Enrolment in Industry Training). Students, you can save time and money by getting a head start on the technical training for an apprenticeship program while you're still in high school. As a Train in Trades student, you will attend trades training classes at North Island College and receive credits that count towards your high-school graduation. You will also receive at least one level of technical training credit.

You can apply for the Train in Trades program if you:

- Are in high school.
- Will finish your training within three months of graduating.
- Will be under the age of 19 when you complete the program.

Students interested in accessing the Train in Trades program in their Grade 12 need to plan Grade 10 and 11 academic years carefully. Please contact Mr. Lontayo if you are interested in more information about ACE-IT (Jeff.Lontayo@sd72.bc.ca)

Current Grade 10 and 11 students--applications for a Trades program beginning in September are due by February 28, 2018. Applications for courses beginning in February 2019 are due no later than September 28, 2018. Please see Mr. Lontayo regarding the pre-requisite for each of these programs and for the applications. Students will be required to purchase their books and pay NISU fees and Learner Resource Fees. SD72 may assist with the cost of tuition.

Trades to consider include:

- aircraft sheet metal manufacturing/ aircraft structures
- automotive service technician
- carpentry foundation (Comox)
- cosmetology(Del Rio Academy Courtenay)
- electrical foundation
- electronics core
- heavy mechanical foundation
- plumbing and piping (Comox),
- welding foundation
- professional cook

Additional North Island College Dual Credit Programs

Trades Sampler at NIC Construction

Not sure which NIC trade to take in your last year? The NIC General Trades sampler is an opportunity to try the following trades: Construction, plumbing, electrical, automotive service, welding, electronics and heavy-duty mechanics. Students will also receive their First Aid, WHMIS and Forklift training as part of the program. The program is offered 2nd semester and will be completed at the end of April. Students will have the option of undertaking work experience 12A and 12B working for the months of May and June for a total of 20 credits.

Trades Sampler at NIC Culinary/Cooking/Baking Focus

Based on the success of the Construction Trades Sampler, North Island College now offers a 3- month full-day trades sampler in cooking and baking. Become work ready in 3 months of focused study in the culinary field. The program is offered 2nd semester only. See Mr. Lontayo to register. At the end of April when the program is completed students have the opportunity to complete 2 months of Work Experience, making this program worth 18 Grade 12 credits.

Trades Sampler at NIC Aerospace/Welding

This is the 3rd Trade Sampler offering from NIC. This program is similar to the Construction and Culinary Trades Sampler. Students will spend the entire day at NIC for the months of February, March and April. The focus of this trades sampler is welding and metal fabrication and the aviation industry. Metal projects will center around building planes as well as hands on opportunities in welding and metal fabrication, electrical and automotive. See Ms. Camerin to register for this NIC program. At the end of April when the program is completed students have the opportunity to complete 2 months of Work Experience, making this program worth 18 Grade 12 credits.

District Programs

IGNITE – Athlete development

This program introduces athletes to high performance training improving their athleticism, physical literacy and fitness through a multi-sport training program which is complimentary to the needs of their current sport. We introduce key body weight and strength training exercises that form the core of many resistance training programs. Athletes will be introduced to Olympic lifts, running techniques and body movement awareness through the gymnastics component of this program. There is a fee associated with this course and it runs outside of the timetable: 2 mornings and 1 afternoon per week. Contact Georgina Knox at Carihi for further information 250-286-6282. IGNITE does not satisfy the requirements for PE-10.

Course Type: PE elective; co-ed

Firefighting Program – Timberline Fire Operations Program

Interested in a career in firefighting? Join members of the Campbell River Fire Department and community volunteers to learn about a career in Firefighting and Disaster Risk Reduction. This program is an all afternoon program 2nd semester. Students will receive credits for Independent Directed Study 12A and Work Experience 12A. Additional credits may be granted for any Work Experience completed outside of the classroom setting. This program takes place in 2nd semester only.

Teen Flight Work Experience

Be part of the only program in Canada that provides participants with the opportunity to build a 2 seater plane, travel and attend air shows, hang out with the Snow Birds and receive high school credits. If you love to learn about engines and enjoy working with your hands with Work Experience option is available to you. The program takes place Wednesday evenings and Sunday afternoons.

Cortes Island Academy

School should be INTERESTING, PRACTICAL and FUN!! Are you a hands-on learner who likes to connect learning to real life applications? Would you like to understand where school and academics fit into the context of YOUR INTERESTS and the world of work? The Cortes Island Academy started on a venture to engage students in a different way! The Cortes Island Academy (CIA) is a pilot project by SD72 in partnership with the Cortes Island Community Foundation, Folk University, and Cortes Literacy. It offers four 5-week modules starting in September 2022. CIA is a project-based, inter-disciplinary, cross-curricular, and cross-social approach to learning and will give students a different lens to view how they engage in school. This pilot project will have an applied/project/problem/place-based delivery as its focus. Students will study in a variety of learning opportunities such as: **outdoor adventure and leadership, marine-based stewardship/aquaculture & seaweed farming, film making with Reel Youth, and tools for truth-telling (journalism)**. Students will research, construct and present projects based on their area of interests within the topics in each module. Students may also have an opportunity to work in teams consisting of members who display different strengths and interests, such as applied sciences, humanities, and the trades. This inter-disciplinary, cross-curricular, and cross-social approach to problem solving and teamwork, as well as learning from Cortes Island's greatest strengths, its natural resources and its people, are the trademarks of CIA's unique learning culture. Interested students should see their academic counsellors for more information and application form.

Offered to: grades 9-12

When: starting September 2022 Quarters 1 & 2

Location: Cortes Island

*Assist with homestay may be provided by SD72 and CIA partners

